

URBAN WATER MANAGEMENT PLAN 2005



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I. INTRODUCTION

A. Purpose of the Plan

This plan has been prepared as a result of the California Urban Water Management Planning Act (Act), Water Code Sections 10610 through 10657. The Act requires that many urban water suppliers prepare an Urban Water Management Plan (Plan) every five years. The plan includes evaluations of expected water supplies and demands, and of the reliability of the supplies, and descriptions of water conservation and water management activities, including water recycling and preparation for water shortages. The complete text of the Act is included as Appendix A herein. This 2005 revision brings up to date all the information about Burbank's water supplies, demands, and water management, and it includes material reflecting changes in the Act since 2000.

Subject to applicable laws and regulations, the City Council of the City of Burbank establishes the policies under which the utility operates. As such, the Council has established the policy that the City of Burbank will continue and expand its current efforts to encourage the efficient use of water in its service area through voluntary water conservation programs conducted in cooperation with its customers. The programs discussed in this report in which the City may participate in the future will be voluntary programs, and so are in keeping with the City's existing policy.

B. Previous Efforts

Burbank prepared Urban Water Management Plans in 1986, 1990, 1995 and 2000. In 1992, the City prepared an Urban Water Shortage Contingency Plan, which was also required by the Legislature, and which became part of the Urban Water Management Plan requirements beginning in 1995. In 1997, Burbank prepared an Integrated Water Resources Plan containing some of the same kinds of information about expected water supplies and demands. The basic information from the Integrated Water Resources Plan has been incorporated into subsequent Urban Water Management Plans.

C. Organization of This Document

Chapter I is an introduction and a brief history of Burbank's water plan. Chapter II provides background information on the City of Burbank: its historical development and expected future development, climate and demographic information, including historical and projected population figures, a description of the water system, past and current water use data, and a section about experiences during recent droughts. Chapter III covers the City's potable water supplies and projected water demands. Chapter IV, with Appendix H, covers demand management (conservation). Chapter V is about water recycling. Chapter VI provides the required comparison of total supplies and demands, with an assessment of reliability. Chapter VII is the Water Shortage Contingency Plan. Finally, the Appendices provide detailed information that is best presented outside the body of the Plan text.

II. SERVICE AREA INFORMATION

This chapter provides background information on the City of Burbank. The discussion here is mainly of historical and current conditions, but population projections and expected growth patterns are included.

A. Historical Background

There has been a community known as Burbank since 1887. Incorporation as a City came in 1911, when the population had reached 500. The municipal water and electric utility was established in 1913. In 1914, an additional 9.4 square miles were annexed. The population grew from 2,913 in 1920 to 16,622 by 1930. Burbank was one of the 13 founding agencies of the Metropolitan Water District of Southern California (MWD), in 1928. World War II brought rapid industrial growth. During the war, 94,000 people were employed at Lockheed. Population grew to 53,899 by 1943, and to 78,577 by 1950. Growth continued at a slower rate for the next 20 years. In 1970 the population was 88,871. By 1980, the population had decreased to 84,625, and the average age of citizens had increased. The 1980s brought new growth, including several high-rise office buildings and dozens of new apartment and condominium buildings. Population had increased to 93,643 by 1990. Lockheed closed its facilities in 1991, when there was also a period of economic recession, but population did not decline. Later in the 1990s, there was expansion by the local studios and a revitalization of the downtown area. The population grew to 100,316 by the 2000 census. Since 2000, former Lockheed and other industrial sites have been redeveloped for commercial and retail uses. Downtown renewal continues. There has been a return to intensive multifamily residential construction that replaces, or sometimes adds on to, older single-family and small multifamily units. The January 2005 population is estimated by the California Department of Finance (DOF) at 106,739.

B. Population and Demographics

Burbank has a current population of 106,739, and an area of 17.1 square miles. There are an estimated 43,338 housing units, approximately half single-family and half multiple-family, with a 2.89% vacancy rate. The 42,085 occupied housing units average 2.517 persons per household. Group quarters house 826 people. (Demographic data is from the DOF Demographic Research Unit, Table E-5, 1/1/2005.) Employment is 92,514, according to Southern California Association of Governments (SCAG). Employment is in a variety of commercial and industrial operations, notably entertainment/media, and including retail, health care and manufacturing, although several large industrial sites have been closed.

The greatest amount of growth in the next several decades is expected to be in the commercial area. The City expects to see an intensification of commercial land use in the downtown area. It is also expecting an increasing amount of mixed-use development (i.e., residential/commercial/retail) along transportation corridors and transportation nodes. New residential development will be predominantly multiple-family, increasing

population density due to redevelopment of older single-family homes on R3 and R4 lots. Continuing redevelopment of areas adjacent to downtown is expected to continue, especially along the South San Fernando Boulevard corridor and the area around the Metrolink station. The smallest expected growth will be in the number of single-family residential dwelling units. Population is expected to reach 125,000 by the year 2030.

Table 1							
Population Projections							
Year	2005	2010	2015	2020	2025	2030	
Population	106,739	110,391	114,043	117,696	121,348	125,000	

C. Climate

The City of Burbank is located in the southeast corner of the San Fernando Valley of Southern California. Most of the rainfall occurs from October through April. Rainfall can vary greatly from year to year; the average is 14.5 inches. Summers are hot and dry. The climate is hotter in the summer than that of coastal areas, although not quite as hot as in the western part of the Valley. There is considerable water demand for landscape irrigation. The *Sunset Western Garden Book* classifies Burbank as Zones 20 and 21. These are Southern California's sections of occasional ocean influence, receiving both maritime and interior weather. Both zones are favorable for growing a variety of plants; in fact, the Los Angeles State and County Arboretum at Arcadia is in Zone 20, bordering Zone 21.

D. Water System

City of Burbank Water and Power (BWP), Water Division, provides potable water, fire protection water, and recycled water for the City of Burbank. Burbank's potable water is supplied by a combination of MWD imported water from the State Water Project and the Colorado River, and groundwater from local wells. The groundwater is treated for removal of volatile organic chemicals. Recycled water comes from the Burbank Water Reclamation Plant, and is delivered through a separate distribution system. (See Chapter III for more information about potable water supplies, and Chapter V for recycled water.)

The Burbank potable water system is composed of pipelines ranging in size from $1\frac{1}{2}$ inches to 30 inches in diameter, booster pumps, reservoirs, wells, MWD connections, and over 26,000 service connections. The water distribution system consists of three major pressure zones and 10 smaller hillside zones. The three largest pressure zones are indicated as No. 1, No. 2, and No. 3. Zone 1 comprises approximately 90% of the total City service area and is the principal pressure zone. The water demand in Zone 1 represents 88% of the total City demand. Elevations in Zone 1 range from 480 feet at the southerly boundary at Chavez Street and Linden Avenue, to 830 feet on Bel Aire Drive at Orange Grove Avenue. The reservoirs that serve Zone 1 have a hydraulic elevation of 904 feet. All the water supplies generally enter Zone 1. (The only exception is that there is an option to have some water from MWD connection B-5 feed Zone 2.) Water is then

pumped from Zone 1 to Zones 2 and 3 at elevations 991 and 1,156 feet above sea level, respectively. From Zones 2 and 3, water is pumped to the 10 hillside zones through successive pumping stations. There are 25 tanks and reservoirs ranging in capacity from 13,500 gallons to 25 million gallons. The storage capability of all the reservoirs is approximately 52.7 million gallons. The storage capability for Zone 1 is approximately 42.9 million gallons (81% of storage).

Water demands by individual customers are subject to wide fluctuations from day to day and throughout the year. Burbank's system has been designed to recognize the inherent variability of water demands. Large storage reservoirs are included in the system, and these reservoirs provide for hourly flow/demand variations throughout the distribution system. The storage capacity is also large enough to allow for short interruptions, one to three days, in the water supply. All of Burbank's pressure zones (except one very small zone at the DeBell Golf Course) are open zones (i.e., they are open to the atmosphere and float on the reservoirs' water levels), so it is not possible to reduce consumption by lowering pressures as would be feasible in some closed distribution systems.

E. Past and Current Water Use

Water use in the City of Burbank is for urban purposes, encompassing residential, industrial, commercial and governmental uses. There are no agricultural water services, although some services are used exclusively for landscape irrigation. Burbank maintains records of water delivered from MWD, produced from wells, and recycled water in acrefeet (AF); the number of water customers updated on a monthly basis; the number of customers operating fire lines connected to city mains; and water sales in units of one hundred cubic feet (CCF) for each of the customer classes. The classes are Residential, Commercial, Industrial, City, Fire Protection, and Recycled. Each period's sales are compared to the previous year's sales during the same period, and any increase or decrease is noted. Appendix C of this Plan presents details of past water use in a variety of formats. The rest of this section is about potable water. Recycled water is discussed separately in Chapter V.

Annual water demand averaged 22,687 acre-feet for the past five years. Unaccounted-for water averaged 4.2% over the past five years, about the same as 4.1% for the previous five years. Representing the difference between water delivered to the system and metered sales to customers, unaccounted-for water is lost through unmetered use (flow testing, reservoir cleaning, main flushing, fire fighting, etc.), faulty meters, evaporation and system leaks.

The annual water sales for 2000 through 2004 averaged 946 million cubic feet (7,079 million gallons). The water was used as follows:

Residential uses	73.9%
Commercial uses	19.1%
Industrial uses	3.7%
City Departments	3.2%
Fire Protection	0.1%

Over the same five years, the average water demand was 20.2 million gallons per day (MGD). Annual maximum day demands averaged 33.4 MGD. The maximum day usually occurs in the period from June to September.

Variation in water demand is attributed to variation in temperature and rainfall, as well as changes in economic conditions, and scarcity (i.e., requests to conserve during droughts). An exceptionally wet, cool year will reduce the water use, while a hot, dry year will increase water use. Demands may be higher than average during drought years, although calls for conservation can reduce demand.

Burbank's water demands have decreased compared to the early 1970s. The average daily water demand decreased from 24.0 to 19.6 MGD between 1970 and 1999. Maximum day water demands were 37 to 39 MGD in the early 1970s, but have not exceeded 36 MGD since 1976. (See the Demand History table in Appendix C.) The figures for gallons of water used per capita per day (GPCD) have also decreased. More efficient water use has been achieved after two major droughts and years of conservation efforts. Industrial use has also been reduced since some major industries have closed. Stepped-up programs of water meter maintenance, testing, and replacement have clearly helped to reduce unaccounted-for water. For the last five years, water demand has been relatively flat, but generally it is increasing with the increasing population.

The rate of water use varies with the seasons and also during the course of each day. Water use for the maximum day of the year generally is 150% of (one and one-half times) the average daily water use. On a hot summer day, water use reaches its peak at 7 p.m. and its minimum at 3 a.m. The rate of water use at the peak hour of the maximum day is about 200% of (twice) the rate for the entire maximum day, while the minimum flow rate at 3 a.m. is about 40% of the maximum day demand. Non-residential users, which include government, schools, industrial and commercial entities, consume approximately 26% of the total system water use. They do not contribute a lot to the peak hour and peak season because of their smaller share of total system use compared to residential, and their relatively constant rate of water use through the year, although school and park landscaping may have a 200% monthly peak from winter to summer. Residential water use, on the other hand, dominates the system water use pattern. It is the major contributor of the system peak hour water use.

F. Drought Experience

The City of Burbank has experienced few supply deficiency problems or water emergencies in the past. During the 1976-77 drought there was no shortage of water, but customers were still encouraged to voluntarily conserve water. This resulted in reduced water usage of approximately 16%. This voluntary cutback helped mitigate the effects of that drought situation throughout the City.

In 1991, due to the prolonged drought of 1987-92, an Incremental Water Conservation Ordinance was implemented. There had already been a call for voluntary conservation efforts to achieve at least a 10 percent reduction in water use. The ordinance began a mandatory 20 percent conservation requirement, compared to base calendar year 1989, on April 1, 1991. This resulted in financial disincentives (Drought Surcharge) to users who failed to conserve the required amount. There was also a Base Rate Adjustment of 15% from April 1, 1991 through March 31, 1992. By April 1, 1992, the water supply outlook had improved, and Burbank went back to a voluntary conservation program. For the 12 months from April 1991 through March 1992, a reduction in water sales of 25% was achieved. Temperature and rainfall did affect the demand for water. June 1991 was cool and cloudy, and most of the summer of 1991 was moderate, with only a few periods of very hot weather. March 1991 had a lot of rain (the "March Miracle"), as did February 1992. In addition, Lockheed had vacated most of its plant since the base year of 1989, accounting for some of the reduction in water use.

III. WATER SUPPLIES AND DEMANDS

Table 2							
Curre	ent and Pr	ojected W	ater Supp	lies			
Water Supply Sources	2005	2010	2015	2020	2025	2030	
Purchased from MWD	16,000	11,760	12,270	13,000	13,660	14,070	
Local groundwater							
Lake Street GAC	0	0	0	0	0	0	
Valley/Burbank O.U.	6,500	12,500	12,500	12,500	12,500	12,500	
Total	22,500	24,260	24,770	25,500	26,160	26,570	
Groundwater Replenishment							
from MWD	1,800	7,400	7,300	7,100	6,900	6,800	
Unit of Measure: Acre-feet/Ye	ar						

A. Metropolitan Water District

Burbank obtained about 64% of its potable water from the Metropolitan Water District of Southern California (MWD) in Fiscal Year 2004-2005. MWD imports water for most of Southern California from Northern California rivers through the State Water Project and from the Colorado River through the Colorado River Aqueduct. The water is treated by MWD and delivered to the City at the treated domestic rate of \$443/AF. Burbank has five connections to the MWD system, with a maximum rated capacity of 115 cubic feet per second (51,610 gallons per minute). See Table 3, below. The MWD system pressure is high enough to deliver water to Burbank's Zone 1 and Zone 2 without pumping, but booster pumps are available at MWD connections B-1 and B-2 to increase the capacity for periods of high demand.

Table 3 MWD Service Connection Capacity								
MWD CONNECTION	MINIMUM FLOW	NO RA	90% OF MAXIMUM	MAXIMUM FLOW				
B-1	3.0 CFS	15.0 -	22.0 CFS	27.0 CFS	30.0 CFS			
B-2	1.5 CFS	3.0 -	7.0 CFS	13.5 CFS	15.0 CFS			
B-3	1.0 CFS	3.0 -	4.0 CFS	9.0 CFS	10.0 CFS			
B-4	2.0 CFS	11.0 -	14.0 CFS	18.0 CFS	20.0 CFS			
B-5	4.0 CFS	<u>7.0</u> -	26.0 CFS	36.0 CFS	40.0 CFS			
TOTAL	11.5 CFS	39.0	73.0 CFS	103.5 CFS	115.0 CFS			

Burbank's MWD service connections are not currently equipped for maximum production. Should demands in the distant future make it necessary, improvements to the service connections could be performed, so as to realize their maximum potential. The nominal maximum capacity of the five connections is vastly more than expected requirements for the next 25 years. (The tables of water supplies in this Plan use expected requirements, not maximum capacity.) Burbank's demand for treated MWD water has actually decreased since groundwater treatment facilities have come on-line. In Fiscal Year 1989-90, Burbank used 22,839 AF of treated MWD water, while the amount used during the latest fiscal year was only 13,765 AF, and the projection for 2030 is 14,070 AF. The City will continue to depend on MWD treated water for blending purposes and to supplement its local groundwater supplies.

In addition to the treated water, the City will purchase increased amounts of untreated MWD water for groundwater replenishment. The untreated replenishment rate is currently \$238 per AF. The City has been working with MWD to develop a new connection to deliver untreated imported water to existing spreading grounds in the north San Fernando Valley for replenishment. The project has been postponed due to technical concerns over the MWD tunnel to which the new delivery pipe would be connected. Other options are being explored. To maintain and optimize groundwater pumping and treatment, the City will need to acquire about 7,400 AF of groundwater per year (AFY) through replenishment or a combination of replenishment and "physical solution" purchases, as described in the next section. The City's total demand on MWD, with replenishment purchases, will increase to about 20,870 AFY by 2030.

As to the capacity and reliability of the MWD supply, it is necessary to look at more than the normal capacity of the MWD pipelines and the five local service connections. One must think about the possibility of a delivery problem with one of the aqueducts, the treatment plants, or the MWD distribution system. More importantly, consideration of the adequacy of the regional supply for future population levels, especially in case of drought, is the big question. MWD must deal with these questions for their entire system. A table of average year supplies and demands for all of MWD is included in Appendix D. MWD's Regional Urban Water Management Plan describes their water planning and management efforts, and it concludes that water will be available to meet demands through 2030. This is significant, because we depend on MWD for most of our water supply. Ultimately, if MWD has sufficient water, so does Burbank. Chapter VI of this Plan has a discussion of the reliability of the MWD regional supply. Burbank is fortunate to be supplied by two different MWD feeder mains and by two MWD treatment plants, one of which can take water from either the Colorado River Aqueduct or the State Water Project. This allows a great deal of flexibility in MWD's operations in case of treatment plant or other temporary problems with the system.

B. Groundwater

Burbank historically utilized groundwater resources. In the early years of the MWD, the imported water was a supplemental supply, since there was well and pumping capacity to serve most of the City's needs with local groundwater. As the City grew, it used more MWD water, but groundwater was still a major source.

This changed in 1979, when, following decades of litigation, the Final Judgment in Superior Court Case No. 650079 determined that the City of Los Angeles owned the rights to the *native* groundwater (derived from precipitation) of the San Fernando Basin. The San Fernando Basin is the underlying groundwater basin of the San Fernando Valley, including Burbank. However, Burbank also gained rights in the Judgment. A copy of the Judgment is included as an annex to this plan.

According to the Judgment, Burbank has a right to *import return water* in the amount of 20% of all the water delivered. This means that 20% of water delivered within Burbank's service area, including imported water, groundwater, recycled water (except power plant), and the irrigation water pumped from private wells by Valhalla Cemetery, is considered to be returned to the groundwater by percolation and is credited to the City. For example, total deliveries in Water Year 2003-04 (October 2003 through September 2004) were 24,235 AF, so the 20% return credit was 4,847 AF. The City can accumulate stored water credits if it extracts less than the 20%. It can also purchase untreated MWD water for groundwater replenishment *spreading* in order to add to its stored water credits. Burbank can purchase an additional 4,200 AF annually of groundwater from the Los Angeles Department of Water and Power (LADWP) for a specified rate (\$293.31 per AF for 2003-04) under the *physical solution* provision of the Judgment. Valhalla is entitled by the Judgment to purchase up to 300 AF of physical solution water out of Burbank's 4,200 AF, and Lockheed may purchased 25 AF. The stored water credit was 22,038 AF as of October 1, 2004, the beginning of Water Year 2004-05.

Groundwater contamination by volatile organic chemicals (VOCs) was discovered in 1980. This was the time when such contamination was being found in all parts of the country. Eventually, all of the City's wells were found to have varying degrees of VOC contamination, resulting in a complete loss of the groundwater supply until treatment plants could be built. Burbank now has two treatment plants for VOC removal, described in the following sections. More recently, the inorganic substances nitrate and chromium have presented problems, also discussed in the following sections.

The City's groundwater supply may be more economical to use than treated MWD water, because of subsidies for groundwater cleanup (Lockheed) or groundwater recovery (MWD). It is also extremely important because it provides a reserve during emergencies or droughts. Evaluating the capacity and reliability of the groundwater supply requires consideration of the separate issues of the safe yield capacity of the aquifer, the physical well and pump capacity, treatment capacity, and water rights. The first, aquifer capacity, is not an issue for Burbank, since the lack of water rights limits extractions far more than any possible shortage of water in the ground. The groundwater basin is managed to stay within the safe yield. Even a three-year drought should not reduce the amount of groundwater Burbank can extract within the limits of the treatment plants. The same is true for well capacity. We have more well capacity than we have water rights or treatment capacity. Six City wells are presently unused. Some of them will be properly abandoned; others will be kept for monitoring use and possible future production use. There are redundant units for the pumps that move treated groundwater into the

distribution system, so supply can be maintained in case of a pump or motor failure. An electric power outage would, however, interrupt the groundwater supply. Treatment plant problems would also interrupt the supply. There are two separate plants, and each has multiple units, so in some cases, production at a lower rate could continue. New groundwater quality problems that could not be handled by existing treatment plants would affect the use of the water. Some water quality issues are discussed in the following two sections. Finally, there are the water rights issues described earlier. Unavailability of water for groundwater replenishment, during a long drought, could limit the City's groundwater pumping. However, the City plans to keep a reserve of 10,000 AF in groundwater credits. This would allow normal extractions to continue for about 18 months without replenishment. After that, assuming the groundwater basin still held enough water, it would be necessary to negotiate the purchase of additional groundwater from LADWP.

C. Lake Street GAC

MWD has expanded its role in Southern California's region-wide water resources management over the past two decades. In 1993, the MWD initiated its Integrated Resources Planning (IRP) process, the purpose of which was to develop a *Preferred Resource Mix* consisting of local water resources, imported supplies, and demand-side management. One of the City's water supply projects, the Lake Street Granular Activated Carbon (GAC) Treatment Plant, was part of the IRP process, and has operated under MWD's Ground Water Recovery Program (GRP). Since Burbank needs to purchase water to replenish the groundwater supply, the groundwater supply can be thought of as a kind of storage as well as an actual source. This is still valuable enough that MWD was willing to subsidize its operation.

The Lake Street GAC Plant first produced water in November 1992. The plant can treat water from City Wells 7 and 15 to remove VOCs. The flow capacity is 2000 gallons per minute, giving a production capacity of 200 to 250 AF per month, allowing for carbon changes about every two months. The plant would normally be operated only during the warmer months of the year, due to operational requirements for the other treatment plant. In the 2000 Urban Water Management Plan, the Lake Street GAC was projected to yield 1,500 AF per year throughout the plan period.

However, the Lake Street GAC has remained shut down since March 2001 because of hexavalent chromium in the groundwater. No production from the plant is included in the current Plan. It was not designed to remove chromium, and blending facilities are not available. Chromium levels in the plant effluent would exceed the limit of five parts per billion adopted by the City Council. New chromium regulations expected to be issued in 2006 will lead to decisions on the future use of the wells and GAC plant. Burbank is sharing with neighboring agencies the cost of temporary additional staff at the Regional Water Quality Control Board to expedite investigations of sites with chromium contamination. Burbank, also with neighboring agencies, is supporting research on chromium removal technology.

D. Valley/Burbank Operable Unit

The EPA project to clean up contaminated ground water added a major component to the City's water supply. The Consent Decree was "entered" on March 25, 1992. The City started construction on June 23, 1993. The project began operation in January 1996. The eight wells and the VOC removal treatment plant were operated by Lockheed-Martin until March 2001, when the City of Burbank took over operation. Plant design capacity is 9,000 gallons per minute (gpm). Assuming 85% availability, the annual production would be 12,336 AF per year, more than half of the City's potable water requirement. However, operational problems have reduced the production levels to less than 10,000 AF for most years. For 2005, the projected output is only 6,400 AF. The output was reduced because of ongoing plant replacements and modifications which, when completed, are expected to improve the capacity. A well field performance study is also in progress and should lead to improved output.

Elevated levels of nitrate in the groundwater make it necessary to blend with MWD water to meet drinking water standards. The BOU treatment plant was designed to allow blending because of this need to reduce nitrate levels. Since then, hexavalent chromium has also been found in the well water, and the blending is managed to keep total chromium below the five parts per billion level set by the City Council, pending new federal and state regulations for hexavalent chromium. Blending for chromium, currently a 50:50 blend of treated groundwater and MWD treated water, also gives acceptable nitrate levels. The blending requirement can make it necessary to limit groundwater production during periods of low water demand; it is the primary reason the Lake Street GAC would be operated, if possible, only during the warmer months. If the MWD supply were to be interrupted, production of groundwater from the Valley/BOU plant would also need to be stopped to avoid exceeding the nitrate standard. The Consent Decree calls for treatment at the rate of 9,000 gpm throughout the year. Treatment at Lake Street GAC can be counted as part of the requirement; however, Lake Street also has chromium issues which prevent that use.

If the groundwater chromium levels were to increase, and depending on the future regulatory limits, production from the plant might have to be reduced. As mentioned in section D, the City is cooperating with neighboring agencies to expedite site investigations, which should lead to enforcement actions, and to find effective chromium treatment technologies. It may eventually be necessary to build additional treatment processes for chromium removal, with money expected to come from parties found to be responsible for the contamination.

E. Desalinated Water

Burbank, located inland in the San Fernando Valley, does not see an opportunity for desalination of ocean water. The groundwater is not brackish. To remove substances like chromium or nitrate, membrane processes like those often used for desalination may one day be used. However, disposal of the brine from such processes is more of a problem than for seaside locations which can send it to an ocean outfall.

As a member agency of the MWD, Burbank may contribute to the development of desalinated water supplies through its MWD water purchases, which include the \$25 per AF Water Stewardship Rate used to support local water supply projects. MWD is offering financial assistance for development of desalinated seawater supplies by member agencies. The entire region benefits when an agency develops a new supply. Burbank is in favor of desalination projects, if they prove to meet standards of engineering and economic feasibility.

F. Exchanges or Transfers

The Act requires water suppliers to describe the opportunities for exchanges or transfers of water on a short-term or long-term basis. The City of Burbank is not currently planning any long-term exchanges or transfers of water. Burbank has two system interconnections with the City of Glendale. These have been used on several occasions to solve short-term operational problems, such as a need for extra water because an MWD connection or pump station is out of service. The policy has been to return the same amount of water, rather than buying and selling water. If MWD had to ration water during a drought, both cities would be affected. The interconnections would only help if one city had extra groundwater capacity to share. Future system interties with the City of Los Angeles would be beneficial.

G. Projected Water Demands

Burbank's historical water demand is shown in Appendix C. The future water demands for the City and the entire region have been estimated by the Metropolitan Water District using the MWD-MAIN Water Use Forecasting System. The computer model uses forecast data from the Southern California Council of Governments (SCAG) for variables including population, housing units, and employment. The City of Burbank is currently using a lower estimate of 2030 population: 125,000 compared to 128,300 used by MWD. Both numbers are within the range of possible development, but the lower number reflects our best view at this time. Therefore, although it is consistent and conservative for MWD to use the SCAG numbers for regional planning, we have adjusted the MWD demand projections based on the lower population numbers. Other adjustments have been made to incorporate the latest local supply estimates being used by Burbank for increased BOU production and increased use of recycled water for landscape irrigation. The MWD projections for the region and for Burbank, and Burbank's local adjustments, are included in Appendix D. Although Burbank is using the lower demand projections for this plan, it is good to note that, even with the MWD projections representing an upper bound, that MWD expects to be able to reliably meet regional demands including their projected higher demands in Burbank.

Calendar Year 2005 potable water demand is expected to be 22,500 AF. Potable water demand is projected to increase to 26,570 AF by 2030, an increase of 18%. Note that the

projected 2030 demand is less than the 1970 demand of 26,851 AF. As discussed in Chapter II, average water demands have decreased since the early 1970s. The 2030 projection also reflects expected increased recycled water use for irrigation, which reduces potable water demand. The total with recycled irrigation for 2030 is 28,020 AF. There is also a large new demand for recycled water from the Magnolia Power Plant. Total projected demand for 2030 including recycled water is 29,720. Recycled water is discussed separately in Chapter V.

The following table provides potable water demand projections for the 25-year plan period. Residential and Commercial demands are increasing, while Industrial and City demands are steady or even decreasing, based on an examination of recent water sales history by class (Appendix C). This makes sense, because residential and office construction continues, while manufacturing is giving way to commercial and retail use, and some City parks have been changed to recycled water for irrigation.

Table 4 Current and Projected Water Use								
Year 2005 2010 2015 2020 2025 2030						2030		
Potable Water	22,500	24,260	24,770	25,500	26,160	26,570		
Demand								
Unit of Measure: Acre-feet/Year								

IV. DEMAND MANAGEMENT MEASURES

Burbank has enjoyed an adequate water supply for its development and continued prosperity. We can appreciate the vision and hard work of those who conceived and built the regional water supply systems that bring water from hundreds of miles away. All three major imported water supplies for Southern California are now subject to new and evolving restrictions. The State Water Project is affected by the CALFED process intended to protect the San Francisco Bay and Delta area. Los Angeles needs to provide water for environmental purposes in the Owens Valley. The Colorado River is subject to increased demands from rapidly-growing desert cities in Arizona and Nevada, and to environmental concerns for its delta area in Mexico. Water is essential for any community. Expected continuing population growth combined with restrictions on all of our water supplies means we need to think about managing demand and dealing with the possibility of water shortages.

Planning for responsible stewardship of the water resource is not necessarily least-cost planning. However, the efficient and reasonable use of water promotes supply reliability. Consequently, the City will continue its existing conservation programs. If future peak water demands can be reduced through demand management, another benefit might be reduced requirements for expensive new water storage and distribution facilities. Cost-effective projects that can achieve multiple goals of reducing demand, enhancing customer service, and increasing environmental benefits will be implemented. The success of all these programs depends primarily on customer participation and funding availability. To defray the cost of demand management programs, the City pursues financial assistance from the MWD when it is available. MWD supports rebate programs for ultra-low-flush toilets and for high-efficiency clothes washers, as well providing a subsidy for the recycled water system expansion.

BWP applied for and was awarded a matching grant from the United States Bureau of Reclamation to implement a residential drip irrigation program. The goal is to distribute 1,200 drip irrigation kits to Burbank residents who attend drip irrigation workshops that BWP will host. The grant will provide matching funds up to \$25,848. The program should save 66 to 92 AF of water per year.

On July 7, 1992, Resolution No. 23,668 of the Council of the City of Burbank endorsed the adoption of the Memorandum of Understanding Regarding Urban Water Conservation in California (MOU) of the California Urban Water Conservation Council (CUWCC), which includes (after some revisions) fourteen recognized water conservation strategies known as Best Management Practices (BMPs). On July 21, 1992, the General Manager of Burbank Water and Power executed the MOU. The MOU requires the submittal of reports on the implementation of the BMPs. The latest report, filed in 2004 and covering 2003 and 2004, fulfills the requirements of the Urban Water Management Planning Act concerning demand management measures, Section 10631, Subdivisions (f) and (g). The report is included as Appendix H, herein.

The status of the BMPs is summarized below, with some explanations and corrections.

- BMP 1, Water Survey Programs for Single-Family and Multi-Family Residential Customers—Not implemented.
- BMP 2, Residential Plumbing Retrofit—Not implemented. We do provide retrofit kits with faucet aerators and low-flow showerheads to customers who request them. MWD is urging a State law for ultra-low-flush toilet and showerhead retrofits upon resale of property, and Burbank Water and Power management has indicated its support.
- BMP 3, System Water Audits, Leak Detection and Repair—Implemented. Full-scale audit is not required because water losses are small.
- BMP 4, Metering with Commodity Rates for all New Connections and Retrofit of Existing—Not implemented according to reports, but it really is substantially implemented. This will be corrected for the next CUWCC reports, due in 2006. Burbank requires meters and bills by volume of use. We have approved just a few unmetered services for landscape irrigation of areas less than 100 square feet, only for City of Burbank facilities such as median strips. This is a very small exception in an otherwise completely metered system. We have not conducted a feasibility study about switching mixed-use accounts to dedicated landscape meters. However, Burbank is a dense, urban environment without a lot of large landscapes. Some of the largest have been converted to recycled water, including the DeBell Golf Course, two shopping centers, and several parks and schools. Planning is underway to expand the recycled water system. Other parks and schools do have separate landscape meters.
- BMP 5, Large Landscape Conservation Programs and Incentives—Not implemented. As mentioned for BMP 4, there are not a lot of large landscapes, mostly schools and parks, and the largest landscapes are on recycled water.
- BMP 6, High-Efficiency Washing Machine Rebate—Implemented.
- BMP 7, Public Information Programs—Implemented.
- BMP 8, School Education Programs—Implemented.
- BMP 9, Conservation Programs for CII Accounts—Not implemented. We need to look at the benefits and costs of implementing water surveys for commercial, industrial, and institutional customers. Assistance may be available from MWD.
- BMP 10 is for wholesale agencies only.
- BMP 11, Conservation Pricing—Not implemented according to reports, but it really is implemented. This will be corrected for the next CUWCC reports, due in 2006. Burbank water rates meet the definition of conservation pricing. The fixed monthly Water Availability Charge is only \$6.80 per month, with the rest of the bill depending on the

metered water use. The Demand Charge is especially meant to restrict summer peak usage, which should lead to more efficient landscape irrigation practices. The sewer service charges are also based on water consumption, except for residential. Sewer service charge is under the Public Works Department, which has stated reasons for the policy. Water rates will continue to increase because of the need to replenish the groundwater supply with purchased water and because of MWD water rate increases. The higher rates will tend to encourage water conservation.

BMP 12, Conservation Coordinator—Implemented.

BMP 13, Water Waste Prohibition—Not implemented. Burbank does not have "measures prohibiting gutter flooding, single-pass cooling systems in new connections, non-recirculating systems in all new conveyor car wash and commercial laundry systems, and non-recycling decorative water fountains." Metered water service and the existing water rates do provide a strong economic incentive to avoid wasting water. Burbank Water and Power Rules and Regulations and Burbank Municipal Code provisions pertaining to water conservation are in Appendix E and Appendix F. The model incremental water conservation resolution in Appendix G contains water use restrictions that would be in effect during a water shortage.

BMP 14, Residential ULFT Replacement Programs (ultra-low-flush toilets)—Implemented.

V. WATER RECYCLING

A. Wastewater Collection and Treatment

The City of Burbank has utilized recycled wastewater since 1967, when the Burbank Water Reclamation Plant (BWRP) was built. Original plant capacity was 6.0 million gallons per day (MGD) that was expanded to 9.0 MGD in 1976. Wastewater collection and treatment systems are operated by the Burbank Public Works Department. In addition to treatment at the BWRP, the City has access to some of the capacity of the North Outfall Sewer and the Hyperion Treatment Plant operated by the City of Los Angeles. The BWRP operates as a "skimming" plant, taking most of the sewage flow. Solids are returned to the sewer to be handled at Hyperion.

The BWRP has a design capacity of 9 million gallons per day (MGD) (10,000 AFY). The current average daily flow is 8 MGD (9,000 AFY). The volume of treated effluent is about 75% of the influent volume, or 6 MGD (6,700 AFY), the difference being sludge that goes to Hyperion. The flow rate varies throughout the day in a typical diurnal flow pattern. The low is about 2 MGD during the late night and early morning hours, increasing to about 10 MGD for the period of 6 to 9 a.m., dropping to about 8 MGD during the day until 6:30 p.m., then increasing to 10 MGD until 10 p.m., after which it begins to decrease to the late night and early morning low.

A plant upgrade was completed in 1999. The new aeration piping, chlorine contact tanks, and dual media filters provided the ability to consistently produce the highest quality recycled water. In 2005, the Biological Nutrient modification was completed. The purpose of this project was to remove ammonia from the discharge to the Los Angeles River. The project also involved using sodium hypochlorite (NaOCl) as a disinfection agent, instead of chlorine gas, and sodium bisulfite for dechlorination of water discharged to the Los Angeles River.

The discharge from the plant is a disinfected tertiary effluent. That means the discharge is water that has received both primary and secondary treatment and is subsequently sand-filtered and chlorinated (tertiary treatment). The BWRP recycled water meets the State of California Department of Health Services' most stringent criteria defined in the California Code of Regulations, Title 22, Division 4, Chapter 3 requirement as *Disinfected Tertiary Recycled Water*. The recycled water from the BWRP may be used for irrigation of golf courses, parks, playgrounds, schoolyards, residential landscaping, and even food crops. The water is approved for all uses but drinking.

B. Current Recycled Water Use

Power Plants

Recycled water was first used at the Burbank Water and Power electric power plant for the cooling towers, beginning in 1967. Blowdown water from the cooling towers, and all the treated effluent not diverted for other recycled uses, was discharged to the Burbank Western Channel, which is adjacent to both the BWRP and the BWP power plant. In August 2005, the new Magnolia Power Plant (300 megawatts) was completed and all recycled water discharge to the Burbank Western Channel was discontinued at the BWP Yard. The Magnolia power plant has a demand of approximately 1.2 to 1.9 MGD for cooling and all other power plant process uses. The average annual usage is estimated to be approximately 1.48 MGD (1,650 AFY). The power plant recycles all its process and cooling water to extinction through its zero liquid discharge (ZLD) unit. The ZLD unit purifies and filters all recaptured water for reuse. The byproduct is a salt cake that is condensed and trucked to a landfill. The two remaining Olive power plants will only run as needed. All cooling and process water will be recycled water with the blowdown from the Olive cooling towers going into the sanitary sewer.

Landscape Irrigation

CalTrans began using recycled water in 1988 for landscape irrigation along the Golden State (I-5) Freeway. The City installed a pipeline under the Golden State Freeway (I-5) in 1992 to distribute recycled water to the new Media City Center, a regional shopping center.

A significant expansion of the recycled water system that would quadruple recycled water use began in 1994. The work was completed in 1997 and recycled water was in use at the Burbank landfill, the DeBell Golf Course, John Muir Middle School, and McCambridge Park. This expansion included upgrading the existing booster station at the BWRP plus two new booster stations, a million gallons of new storage, and 17,000 feet of pipeline. The project was financed by a \$3.1 million loan from the State Water Reclamation Loan Program and a \$2.2 million revenue bond sale. Repayment costs are about \$400,000 annually and will continue until 2014. The new projects use about 450 AFY.

Recycled system expansion has continued with the joint support of the Redevelopment Agency, BWP and infrastructure improvements at major redevelopment sites. The recycled water system in 2005, now extends to the Chandler Bikeway, Costco, the Empire Center and Robert Gross Park. The AMC theater complex and Burbank High School are also connected to the existing recycled water system. These developments are expected to add approximately 170 AF to annual recycled water consumption.

C. Potential Future Recycled Water Use

The City is currently developing a Recycled Water Master Plan with the assistance of a matching grant from the State of California. The potential build-out of the Recycled System will be well defined, optimized and programmed with the completion of the plan. Potential industrial uses such as film processing and plating will be considered besides the conventional expansion to meet landscape irrigation needs. The goals are to fully utilize all the recycled water available, to offset the demands for potable water on the MWD and local ground water production, and to lower the peak demands on the water system in the summer months.

Recycled water will be utilized at the Media Studios (North) and the Airport parking lot at Hollywood Way and Empire Avenue within the year. Provision has been made in the project plans to utilize recycled water at Ovrom Park and the South San Fernando streetscape as soon as a recycled water main can be extended to the area. Valhalla Memorial Park is also a priority site for recycled water within the immediate future. Some of the sites are already programmed for connection to the recycled water system while others will be addressed in the Master Plan.

For the next twenty-five years, the use of recycled water is expected to be as follows:

Table 5 Recycled Water Use							
Year	2005	2010	2015	2020	2025	2030	
BWP Power Plants	530	1,700	1,700	1,700	1,700	1,700	
Recycled Water Use (AF)	570	1,100	1,150	1,250	1,400	1,450	
TOTAL	1,100	2,800	2,850	2,950	3,100	3,150	

D. Actions to Facilitate the Installation of Dual Distribution Systems

City officials from the City Council and department managers have always maintained a positive outlook towards the use of recycled water. The use of recycled water has been a tremendous opportunity for the City of Burbank to do its part in conserving the scarce and very important State and local potable water supplies. The citizens and existing users have expressed positive feedback about the use of the recycled water system, and required public notification signs provide a friendly message about its use.

The City has full-time staff to help existing users comply with regulatory requirements as well as to inform and encourage the development of new users. To encourage the use of recycled water, the City offers recycled water at approximately 85% of the corresponding potable water rate.

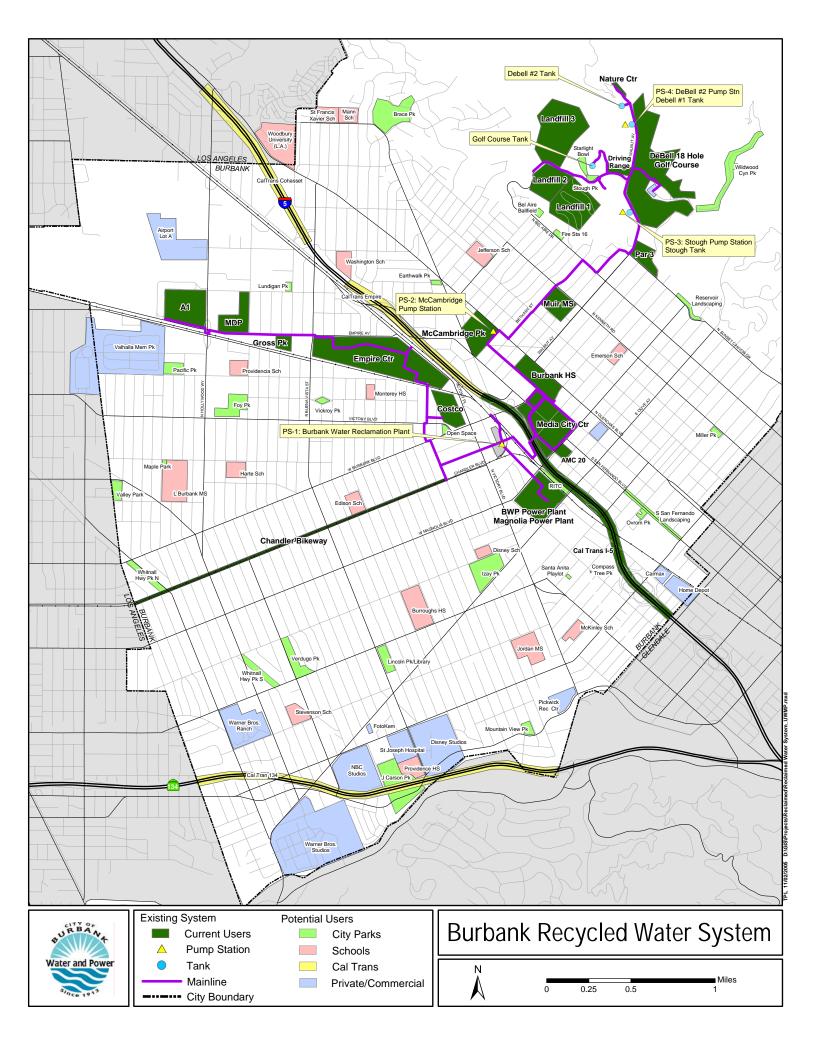
The Rules and Regulations of Burbank Water and Power include a requirement that:

Any development with more than one acre of landscaped area or with over one million gallons of annual non-potable water use that could be substituted with Recycled Water shall design and construct for the future use of Recycled Water.

The Rules and Regulations also contain other procedures to clarify what is required to receive recycled water service, which standardizes and thus facilitates recycled water use.

The new revenue from MPP recycled water sales will facilitate system expansion. The revenue will support the programmed build-out of the Recycled Water System Master Plan across the next 10-15 years.

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VI. COMPARISON OF WATER SUPPLIES AND DEMANDS

The Act requires agencies to provide a comparison of projected water supply and demand for the next 20 years, through 2025. In order to be useful through the next five years for Water Supply Assessments (SB 610) and Written Verifications Of Water Supply (SB 221), which also require a 20-year planning horizon from the year they are performed, this plan has been extended to 25 years, through 2030. The following table provides a comparison for average years through 2030. The table combines the potable and reclaimed projections from Chapters III and V. MWD water purchases for groundwater replenishment are not included here, but they are shown in Table 2 in Chapter III.

Table 6 Projected Supply and Demand Comparison							
	2005 2010 2015 2020 2025 2030						
Supply totals	23,600	27,060	27,620	28,450	29,260	29,720	
Demand totals	23,600	27,060	27,620	28,450	29,260	29,720	
Difference		0	0	0	0	0	
Units of Measure: Ac	Units of Measure: Acre-feet/Year						

The Act also calls for supply and demand comparisons for a single dry year and for multiple dry years. It calls for an estimate of minimum water supply during the next three years based on the driest three years on record. These provisions are more applicable to agencies relying on local surface water supplies that are greatly dependent on each year's rainfall. As we have seen, Burbank's groundwater supply is limited more by water rights and by available treatment capacity than by hydrology. Furthermore, the MWD draws its supply from such a wide area, extending even to the Colorado River headwaters in the Rocky Mountains, that it defies a simple definition of a dry year. It also tends to be unaffected by a single dry year, since so much storage is available.

Generally, dry weather, especially hot, dry weather, causes an increase in water demand, mostly for landscape irrigation. On the other hand, the response to calls for special conservation during past droughts has been excellent, with the demand actually decreasing. MWD predicts higher-than-average demand for a dry year, and even higher demands for three dry years, but with the demands decreasing (this is in the WSDM plan) in the second and third years. MWD also shows increased supplies to meet the demands, reflecting withdrawals from storage. A number of factors have to be considered in defining a dry year. A year with low rainfall in our local area is what tends to increase local demands. However, local rainfall can be less than average, while the snowpack in mountain watersheds is normal. The import supply would be fine in such a year. (Burbank's groundwater right is virtually unaffected either way.) On the other hand, we might receive close to normal rainfall locally in a year when the mountains accumulate

relatively little snow. Or, light winter rains might make it a dry year, but cool, cloudy spring weather might last longer than usual, resulting in lower summer water demands.

MWD discusses regional water supply reliability in its September 2005 *Draft Regional Urban Water Management Plan* (RUWMP). That plan draws upon the 1996 *Integrated Resource Plan* (IRP), the 1999 *Water Surplus and Drought Management* (WSDM) *Plan*, the 2004 IRP Update, and other MWD planning studies. To develop average year supply and demand estimates, MWD used the historic hydrology for 1922 through 2004. For dry year planning, they used the historic one-year (1977) and three-year (1990-1992) dry periods on the State Water Project because it is "the largest and most variable supply." MWD concludes that it can meet 100% of full-service demands through 2030.

The RUWMP includes information about water quality of the State Water Project and Colorado River Aqueduct supplies. The main concern for the Colorado River Aqueduct is salinity. MWD is even looking at desalination as a contingency plan. For the State Project, although salinity is lower, it is also a concern, especially since State Project water is already being used to blend with high-salinity Colorado River water to reduce total salinity. Total organic carbon and bromide are also of concern, since they lead to formation of disinfection byproducts during drinking water treatment. MWD is making upgrades to its treatment plants to reduce disinfection byproduct formation. Treatment plant improvements are expensive, and desalination leads to some water loss. Still, MWD "anticipates no significant reductions in water supply availability from [State Project and Colorado River supplies] due to water quality concerns over the study period."

In conclusion, we do not expect critical shortages during the 25-year planning period through 2030, based on the MWD updated Regional Urban Water Management Plan. We rely on MWD for most of our water, either for direct use or for groundwater replenishment, and so we rely on and cooperate with their regional water supply planning. It is reasonable to expect nothing worse than the kind of drought conservation efforts we have made in the past. Under MWD's Integrated Resource Plan (IRP), the goal is to reduce the occurrence of shortages as experienced in 1991 to less than once in 50 years. Of course, MWD is planning that everyone continues with demand management efforts—their water demand projections include significant increases in conservation throughout the planning period. It is essential to make continuing investments in water demand management, and to use creativity in finding new ways to improve it. The reward will be continuing reliability of our water supply.

VII. WATER SHORTAGE CONTINGENCY PLAN

The Act requires agencies to plan for water shortages. There are two major types of water shortage, one resulting from some catastrophe and the other because of drought. The two types should be considered separately, although some responses are common to both.

A water shortage can result from a disaster like an earthquake, a major power outage, or a major problem with a water supply source, such as a breakdown or a water quality disruption. This would occur with little or no warning, but it typically would not last very long. (Some of the damage might take a long time to repair, but at least a partial restoration of supply could be expected within days or a few weeks.) However, MWD estimates that an outage on the Colorado River Aqueduct or the State Water Project resulting from a major earthquake could last up to six months.

MWD developed Emergency Storage Requirements based on the three major aqueducts (SWP, CRA, and Los Angeles) being out of service for six months after a major earthquake. The new Diamond Valley Lake and other Southern California reservoirs and groundwater basins provide the emergency storage. After such a catastrophe, MWD's emergency plan assumes a mandatory 25% cutback in firm supplies to member agencies. The Department of Water Resources, with the cooperation of MWD and others, did a limited study in 2005 on the effects of extensive levee failures in the Delta. It appears that this catastrophe could result in a reduction of 10% in firm deliveries. Extraordinary conservation would be required to stay within the reduced supply in either of the above extreme cases.

Burbank has a formal disaster preparedness program. Every City employee is considered a disaster services worker. Training and drills are held regularly. When an emergency occurs, the Emergency Operations Center can be activated. This involves personnel from all City departments, and it operates according to the formal *SEMS* (Standardized Emergency Management System) procedures. There is a formal process for checking the water system for problems.

If Burbank experiences a major power failure, but MWD is still producing water, Burbank can receive it without pumping to Zone 1 and 2. Portable diesel pumps are available to move water to higher zones, if necessary. If all water supplies to the City were interrupted, the water stored in local distribution reservoirs could be made to last at least three days; except that in case of a major earthquake, there would be some water lost due to broken pipelines. (The damage to Burbank's water system from the 1971 Sylmar and 1994 Northridge earthquakes was actually quite limited, but we might not always be so lucky.) The strictest emergency water use restrictions would be put in place, such as prohibitions on landscape irrigation, car washing, in fact, everything but what is necessary for health. If necessary, arrangements would be made to supply drinking water by truck or at whatever distribution points might be made available, depending on system conditions.

Burbank would manage less severe short-term deficiency or emergency situations by encouraging voluntary water conservation, by increasing local groundwater pumping, by purchasing additional water from the MWD to the extent available and by using emergency interconnections to adjacent water agencies. If necessary, mandatory rationing would be imposed by stages, as outlined below. Because we now have two groundwater treatment plants, we have more flexibility than before. If a problem developed with one of the plants, we could obtain additional water from MWD. Or, if the MWD supply had to be reduced, we would still have the groundwater, whereas, in previous years, we might have been totally out of water. The MWD water for blending is necessary to maintain production from the Valley/BOU plant, but enough might be available even if some cutback in MWD flows took place. There are presently two emergency interconnections with the City of Glendale. These emergency interconnections have proven to be effective in providing a short-term supplemental supply.

We do not expect any rationing due to drought during the 25-year plan period, based on MWD's RUWMP. When advised of a dry water supply year, we would call for increased voluntary water conservation efforts. In the event of rationing, we would implement an incremental program similar to that used during the last drought. Under this concept, a minor emergency would trigger implementation of step one, followed by step two and succeeding steps as the emergency increased, or until the situation was under control. The City would expect to follow the lead of MWD and the California Department of Water Resources as to the level of water usage reductions required. Such actions could range from media requests to control usage in step one, to full-scale rationing in the most extreme case. The MWD WSDM Plan describes shortage (and surplus) stages, including the most severe, shortage stage 7 or "extreme shortage", which would require allocation of water supplies to full-service customers. Burbank does have a preferential right to purchase about 0.95% of the MWD water supply, or 16,000 to 19,000 AFY, under Section 135 of the Metropolitan Water District Act. MWD's planning is designed to avoid the stage of extreme shortage which would bring preferential rights into conflict with a broader regional allocation.

One example of a step approach is as follows. There would be a continuous program of conservation activities throughout the entire water emergency situation. When water shortages appear imminent, the public would be called upon to implement a higher-thannormal level of conservation. When water shortages reach 10% of the total annual supplies, the City may implement restrictions on water usage. A 10% to 20% shortage may trigger additional restrictions, including economic incentives, such as a surcharge or water tax. Finally, a 30% shortage may be serious enough to begin full-scale rationing programs. See Appendix G for a typical Model Incremental Water Conservation Program Resolution. The Model Incremental Water Conservation Program is based on the one adopted during the last drought. It uses commodity pricing structures to stimulate conservation and reduce demand. The City will implement this or a similar resolution if needed during future periods of reduced supplies. The percentage numbers given above are illustrative only. Actual numbers would be developed through discussions with the City Council, the City Manager, and Burbank Water and Power. The model resolution

has seven steps leading up to a 30% reduction. If reductions of 40% or 50% were necessary, additional phases could be added.

The model resolution includes prohibitions on hose-washing of paved areas, on irrigation between 10 a.m. and 4 p.m., on allowing a hose to run while washing vehicles, etc., and on serving water at restaurants unless requested, and it includes requirements for watersaving landscaping and plumbing. (Please see Appendix G for the details.) Ultra-low-flush toilets are now required by the plumbing code. Additional restrictions on water use under a 40% or 50% reduction would likely include prohibitions against car washing and lawn irrigation, and moratoriums on new services.

Along with the percentage reduction targets, consumption reduction methods in the model resolution include a drought surcharge as an economic penalty for excessive use. Other features include restrictions on new water service connections, base line allocations for residential users below which further reductions are not required, an appeals process, and requirements for Water Conservation Plans for large commercial and industrial water users and for City departments. The Water Division would also try to defer main and fire hydrant flushing and reservoir drainage for maintenance.

The Rules and Regulations of the Water Division, Burbank Water and Power, have a few provisions about water conservation, including the possibility of rationing in an emergency. These are included in this plan as Appendix E.

To overcome the revenue shortfall due to drought conservation, the resolution includes base rate adjustments ranging from 5% to 43% of the Quantity Charge and Demand Charge. This rate increase also serves as an economic incentive to conserve water. The water rates also include a fixed service charge and a Water Cost Adjustment Charge, which are not subject to the base rate adjustment. Since the WCAC is a large part of the total water bill, the increase in a customer's bill is much less than the percentages of the base rate adjustment. Under today's water rates, a 43% increase in the base rates would bring a 14% increase in the monthly bill for 20 CCF. A more up-to-date analysis would be done at the time of a future drought, to consider the existing financial conditions, but the results would probably be similar. To the extent that water supply reductions would be from the more expensive imported water, the average cost of water might be less. On the other hand, there are many fixed costs of operating a water system, and the overall revenue would be reduced below budgeted levels by the extraordinary conservation measures. Some deferment of capital spending would be considered, if necessary, to further offset the loss of water sales revenues.

Finally, to determine actual reductions in water use, the procedures for recording daily production and monthly metered sales are already in place. Regular comparisons to base year 1989 and to the previous fiscal year are made every month for metered sales. During a drought, the existing data would be fully utilized to monitor reductions compared to pre-drought conditions. Unaccounted-for water could also be closely watched. Information would be made available to decision-makers as needed for the ongoing drought response.

APPENDIX A California Urban Water Management Planning Act

Established: AB 797, Klehs, 1983 Amended: AB 2661, Klehs, 1990

AB 11X, Filante, 1991

AB 1869, Speier, 1991

AB 892, Frazee, 1993

SB 1017, McCorquodale, 1994

AB 2853, Cortese, 1994

AB 1845, Cortese, 1995

SB 1011, Polanco, 1995

AB 2552, Bates, 2000

SB 553, Kelley, 2000

SB 610, Costa, 2001

AB 901, Daucher, 2001

SB 672, Machado, 2001

SB 1348, Brulte, 2002

SB 1384, Costa, 2002

SB 1518, Torlakson, 2002

AB 105, Wiggins, 2004

SB 318, Alpert, 2004

CALIFORNIA WATER CODE DIVISION 6 PART 2.6. URBAN WATER MANAGEMENT PLANNING

CHAPTER 1. GENERAL DECLARATION AND POLICY

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

10610.2. (a) The Legislature finds and declares all of the following:

- (1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.
- (2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.
- (3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.
- (4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in

- its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years.
- (5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.
- (6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.
- (7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.
- (8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.
- (9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.
- (b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.
- 10610.4. The Legislature finds and declares that it is the policy of the state as follows:
 - (a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.
 - (b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.
 - (c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

CHAPTER 2. DEFINITIONS

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

- 10611.5. "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.
- 10612. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.
- 10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.
- 10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.
- 10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.
- 10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.
- 10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.
- 10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

CHAPTER 3. URBAN WATER MANAGEMENT PLANS Article 1. General Provisions

10620.

(a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

- (b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.
- (c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d)

- (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.
- (2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.
- (e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.
- (f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

10621.

- (a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero.
- (b) Every urban water supplier required to prepare a plan pursuant to this part shall notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.
- (c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

Article 2. Contents of Plans

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:

- (a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.
- (b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:
 - (1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.
 - (2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree.
 - For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.
 - (3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

- (4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
- (c) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:
 - (1) An average water year.
 - (2) A single dry water year.
 - (3) Multiple dry water years.

For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

- (d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.
- (e)
- (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses:
 - (A) Single-family residential.
 - (B) Multifamily.
 - (C) Commercial.
 - (D) Industrial.
 - (E) Institutional and governmental.
 - (F) Landscape.
 - (G) Sales to other agencies.
 - (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.
 - (I) Agricultural.
- (2) The water use projections shall be in the same five-year increments described in subdivision (a).

- (f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:
 - (1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:
 - (A) Water survey programs for single-family residential and multifamily residential customers.
 - (B) Residential plumbing retrofit.
 - (C) System water audits, leak detection, and repair.
 - (D) Metering with commodity rates for all new connections and retrofit of existing connections.
 - (E) Large landscape conservation programs and incentives.
 - (F) High-efficiency washing machine rebate programs.
 - (G) Public information programs.
 - (H) School education programs.
 - (I) Conservation programs for commercial, industrial, and institutional accounts.
 - (J) Wholesale agency programs.
 - (K) Conservation pricing.
 - (L) Water conservation coordinator.
 - (M) Water waste prohibition.
 - (N) Residential ultra-low-flush toilet replacement programs.
 - (2) A schedule of implementation for all water demand management measures proposed or described in the plan.
 - (3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.

- (4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.
- (g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following:
 - (1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors.
 - (2) Include a cost-benefit analysis, identifying total benefits and total costs.
 - (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.
 - (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.
- (h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
- (i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
- (j) Urban water suppliers that are members of the California Urban Water Conservation Council and submit annual reports to that council

- in accordance with the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated September 1991, may submit the annual reports identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivisions (f) and (g).
- (k) Urban water suppliers that rely upon a wholesale agency for a source of water, shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).
- 10631.5. The department shall take into consideration whether the urban water supplier is implementing or scheduled for implementation, the water demand management activities that the urban water supplier identified in its urban water management plan, pursuant to Section 10631, in evaluating applications for grants and loans made available pursuant to Section 79163. The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities.
- 10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:
 - (a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.
 - (b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.
 - (c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

- (d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.
- (e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.
- (f) Penalties or charges for excessive use, where applicable.
- (g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.
- (h) A draft water shortage contingency resolution or ordinance.
- (i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

- (a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.
- (b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.
- (c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.
- (d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement,

- wetlands, industrial reuse, groundwater recharge, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.
- (e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.
- (f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.
- (g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

Article 2.5 Water Service Reliability

10635.

- (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.
- (b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

- (c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.
- (d) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

Article 3. Adoption and Implementation of Plans

10640. Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630).

The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

10641. An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10644.

(a) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(b) The department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part. The report prepared by the department shall identify the outstanding elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

10645. Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

CHAPTER 4. MISCELLANEOUS PROVISIONS

10650. Any actions or proceedings to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

- (a) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.
- (b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.

10651. In any action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public

Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

10654. An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the "Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.

10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

10656. An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

10657.

- (a) The department shall take into consideration whether the urban water supplier has submitted an updated urban water management plan that is consistent with Section 10631, as amended by the act that adds this section, in determining whether the urban water supplier is eligible for funds made available pursuant to any program administered by the department.
- (b) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.

APPENDIX B 2005 Urban Water Management Plan Checklist

2005 Urban Water Management Plan Checklist

Checklist Organized According to Water Code Section

Section of Law	Items to address	Page # In Plan
10620 (d) (2)	Coordinate the preparation of its plan with other appropriate agencies, including direct and indirect suppliers, wastewater, groundwater, and planning agencies (refer to Section 10633).	Арр. І
10621 (b)	Notify city or county that plan will be reviewed.	App. I
10631 (a)	Provide current and projected population in 5-year increments to 20 years. Describe the climate and other demographic factors.	3 2-3
10631 (b)	Identify and quantify the existing and planned sources of water available in 5-year increments to 20 years.	7-11
10631 (b)	Include groundwater information, including a copy of court order or decree of adjudication	8-11, Annex
10631 (c)	Describe the reliability of the water supply.	8-11, 21-22
	Describe the vulnerability of water supply to seasonal or climatic shortage.	9-10
	Describe average, single dry and multiple dry water year data.	21-22
	Describe any plans to replace inconsistent water sources.	N/A
10631 (d)	Describe opportunities for exchanges or transfers of water on short-term or long-term basis.	12
10631 (e) (1)	Quantify past and current water use in 5-year increments to 20 years.	4-6, 12-13
10631 (e) (2)	Identify projected water uses among water use sectors in 5-year increments to 20 years.	12-13
10631 (f) (g) (j)	Provide a description of water demand management measures. Members of CUWCC may submit annual reports.	14, App. H
10631 (h)	Describe water supply projects and programs that may be undertaken to meet total projected water use	N/A
10631 (i)	Describe opportunities for development of desalinated water	11
10631 (k)	Exchange supply and demand information with wholesale agency (MWD)	App. I
10632 (a)	Provide water shortage stages of action, including up to a 50 percent reduction, outlining specific water supply conditions at each stage.	24
10632 (b)	Provide minimum water supply estimates based on driest three-year historic sequence.	21-22
10632 (c)	Provide actions a water supplier will take to prepare for a catastrophe.	23-24
10632 (d)	Provide mandatory prohibitions.	24-25
10632 (e)	Provide consumption reduction methods.	23-25
10632 (f)	Provide penalties or charges.	25

Section of Law	Items to address	Page # In Plan
10632 (g)	Provide an analysis of the impacts on the water supplier revenues and expenditures.	25
10632 (g)	Provide measures to overcome revenue and expenditure impacts.	25
10632 (h)	Provide a copy of a draft water shortage contingency resolution or	App. G
10632 (i)	ordinance. Provide a mechanism for determining actual reductions in water use.	25
10633 (a)	Describe the wastewater collection and treatment systems in the supplier's service area.	17
	Quantify the amount of wastewater collected and treated in the supplier's service area.	17
	Describe the methods of wastewater disposal in the supplier's service area.	17
10633 (b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	17-19
10633 (c)	Describe the type, place, and quantity of recycled water currently used in the supplier's service area.	18-19
10633 (d) (e)	Describe and quantify potential uses of recycled water in 5-year increments to 20 years.	19
	Describe the technical and economic feasibility of serving potential recycled water users.	19
10633 (f)	Describe the actions that may be taken to encourage recycled water use.	19-20
40000 ()	Provide the projected acre-feet results of recycled water used per year.	19
10633 (g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	19
	Provide actions to facilitate the installation of dual distribution systems and to promote recirculating uses.	19-20
10634	Include information on quality of water sources and how quality affects water management and supply reliability.	9-11, 22
10635 (a)	Provide an assessment of the reliability of the water supplier's water service to its customers during normal, single dry, and multiple dry water years.	21-22
	Compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in 5-year increments (refer to 10631 (c)).	21
	Compare normal, single dry, and multiple dry water year projected water supply sources available to the water supplier with the normal, single dry, multiple dry water year projected water uses (refer to 10631 (c)).	21-22
10642	Make plan available for public inspection before its adoption.	App. I
	Adopt plan as prepared or as modified after the public hearing	Арр. І

APPENDIX C Water Demand History and Population Growth

WATER PRODUCTION AND SALES FOR FISCAL YEARS 1989/1990 THROUGH 2004/2005

VALUES IN ACRE-FEET

F.Y. ENDING	CITY WELLS/	LOCKHEED		TOTAL POTABLE	POTABLE	UNACCOU	UNACCOUNTED-FOR POTABLE WATER	RECYCLED WATER) WATER	TOTAL
JUNE 30	LAKE ST. GAC	B.O.U.	MWD	PRODUCTION	SALES	AC-FT	PERCENT	POWER PLANT	IRRIGATION	PRODUCTION
1990			22,839.1	22,839.1	21,235.2	1,603.9	7.0%	3,462.7	33.3	26,335.1
1991	891.6		19,291.2	20,182.8	18,857.7	1,325.1	9.9	1,302.4	112.4	21,597.6
1992	283.1		17,822.5	18,105.6	16,471.9	1,633.7	%0'6	1,711.5	72.9	19,890.0
1993	986.6		18,151.6	19,150.2	18,058.6	1,091.6	2.7%	2,662.5	30.4	21,843.1
1994	1,897.4		18,077.5	19,974.9	18,547.1	1,427.8	7.1%	3,435.1	21.2	23,431.2
1995	2,559.6		17,099.2	19,658.8	18,488.2	1,170.6	%0.9	2,638.0	106.7	22,403.5
1996	2,216.6	4,283.8	14,392.0	20,892.4	20,191.1	701.3	3.4%	1,560.2	171.2	22,623.8
1997	1,766.9	7,837.2	12,161.1	21,765.2	20,910.0	855.2	3.9%	2,149.7	525.0	24,439.9
1998	1,418.5	5,435.9	13,636.4	20,490.8	19,516.1	974.7	4.8%	1,620.6	405.9	22,517.3
1999	1,411.2	5,804.6	14,106.9	21,322.7	20,389.8	932.9	4.4%	1,190.9	439.1	22,952.6
2000	1,342.8	13,426.8	8,154.4	22,924.0	21,959.7	964.3	4.2%	1,712.7	515.4	25,152.1
2001	1,363.6	7,793.8	13,477.7	22,635.1	21,475.8	1,159.3	5.1%	2,689.8	466.1	25,790.9
2002	0.0	10,886.0	11,939.0	22,825.0	21,826.4	938.6	4.4%	1,545.0	497.8	24,867.9
2003	0.0	9,912.3	12,097.7	22,010.0	21,306.9	703.1	3.2%	947.9	380.5	23,338.4
2004	0.0	8,949.1	14,547.2	23,496.3	22,353.6	1,142.7	4.9%	113.7	475.2	24,085.2
2005	0.0	7,823.7	13,764.8	21,588.5	20,827.4	761.1	3.5%	41.2	511.4	22,141.1
				·	UNACCOUNTED-FOR WATER:	ED-FOR WA	TER:			

FEBRUARY THROUGH SEPTEMBER 1991--LIMITED, CLOSELY-MONITORED PRODUCTION FROM WELLS 6A AND 7 NOVEMBER 1992--BEGIN LAKE STREET GAC TREATMENT PLANT OPERATION WITH WELLS 7 AND 15 MARCH 2001--LATEST OPERATION OF LAKE STREET GAC PLANT JANUARY 1996--BEGIN LOCKHEED/BURBANK OPERABLE UNIT

6.8% 4.1% 4.2% 5.1%

> FIVE YEARS 1996 - 2000: FIVE YEARS 2001 - 2005:

16 YEARS 1990-2005:

FIVE YEARS 1991 - 1995:

UNTIL SEPTEMBER 2003, RECYCLED WATER-POWER PLANT INCLUDES DILUTION WATER EQUAL TO 4 TIMES THE COOLING TOWER WATER.

CITY OF BURBANK P.S.D WATER DIVISION

WATER DEMAND HISTORY

CALENDAR		MINIMUM DAY	RATIO MIN /		MAXIMUM DAY	RATIO MAX /	AVERAGE DAY	YEAR TOTAL DE	
YEAR	DATE	(MG)	AVG	DATE	(MG)	AVG	(MG)	(CCF)	(AFY)
1970	DEC 25	11.180	0.466	AUG 07	37.079	1.547	23.971	11,696,159	26,851
1971	DEC 25	11.186	0.482	SEP 13	39.679	1.709	23.223	11,331,128	26,013
1972	JAN 01	12.149	0.530	JUL 31	38.776	1.692	22.924	11,216,171	25,749
1973	DEC 25	11.384	0.518	JUN 21	37.612	1.711	21.989	10,729,111	24,631
1974	JAN 20	11.554	0.523	JUN 28	35.209	1.594	22.094	10,780,670	24,749
1975	DEC 25	11.492	0.558	SEP 24	34.524	1.675	20.611	10,057,013	23,088
1976	FEB 15	11.736	0.562	JUN 28	36.834	1.763	20.893	10,222,441	23,467
1977	DEC 25	9.897	0.558	JUL 27	26.482	1.492	17.748	8,659,899	19,880
1978	JAN 01	9.939	0.527	SEP 25	30.042	1.593	18.861	9,202,973	21,127
1979	DEC 25	10.332	0.528	JUN 12	31.423	1.606	19.570	9,548,996	21,921
1980	MAR 02	10.813	0.532	JUL 30	30.711	1.510	20.340	9,951,986	22,847
1981	FEB 08	11.354	0.541	AUG 28	34.106	1.624	21.007	10,249,894	23,531
1982	APR 11	11.106	0.590	SEP 02	30.006	1.595	18.808	9,176,962	21,067
1983	DEC 25	11.141	0.587	AUG 03	35.037	1.846	18.977	9,259,343	21,257
1984	DEC 25	11.809	0.550	SEP 05	33.386	1.555	21.463	10,501,446	24,108
1985	NOV 29	12.343	0.596	JUL 02	34.797	1.681	20.694	10,097,462	23,181
1986	SEP 25	11.071	0.549	JUL 28	33.020	1.637	20.165	9,839,288	22,588
1987	MAR 22	11.710	0.574	SEP 02	30.431	1.492	20.397	9,952,561	22,848
1988	DEC 25	11.417	0.558	APR 8	31.794	1.553	20.471	10,015,729	22,993
1989	FEB 12	11.349	0.544	APR 7	31.161	1.494	20.863	10,179,581	23,369
1990	JAN 14	12.851	0.652	JUN 28	29.646	1.503	19.725	9,624,722	22,095
1991	MAR 24	9.630	0.590	SEP 23	22.803	1.397	16.320	7,963,304	18,281
1992	JAN 1	9.383	0.565	AUG 14	25.822	1.555	16.610	8,126,902	18,657
1993	JAN 2	9.939	0.576	SEP 11	25.907	1.501	17.256	8,419,718	19,329
1994	DEC 25	10.424	0.573	AUG 12	26.510	1.457	18.194	8,877,600	20,380
1995	JAN 7	8.498	0.479	AUG 2	29.896	1.686	17.728	8,650,231	19,858
1996	MAR 2	10.147	0.544	AUG 24	32.145	1.723	18.661	9,083,422	20,853
1997	OCT 30	10.080	0.506	MAY 29	32.277	1.620	19.923	9,720,916	22,316
1998	NOV 11	6.509	0.357	AUG 27	32.087	1.761	18.217	8,888,772	20,406
1999	MAR 16	10.483	0.536	SEP 9	34.343	1.755	19.572	9,550,012	21,924
2000	MAR 5	11.271	0.548	JUL 23	32.784	1.595	20.554	10,056,352	23,086
2001	JAN 11	10.318	0.519	MAY 31	31.576	1.587	19.897	9,708,283	22,287
2002	OCT 31	7.566	0.375	SEP 1	33.332	1.654	20.154	9,833,888	22,576
2003	DEC 26	11.730	0.580	AUG 11	34.229	1.694	20.208	9,860,416	22,636
2004	NOV 21	9.723	0.478	SEP 13	35.119	1.694	20.345	9,954,157	22,852
20 YEAR AVE	RAGE	10.322	0.535		30.984	1.602	19.298	9,420,166	21,626
15 YEAR AVE	RAGE	9.904	0.525		30.565	1.612	18.891	9,221,246	21,169
10 YEAR AVE	RAGE	9.633	0.492		32.779	1.677	19.526	9,530,645	21,879
5 YEAR AVE	RAGE	10.122	0.500		33.408	1.645	20.232	9,882,619	22,687

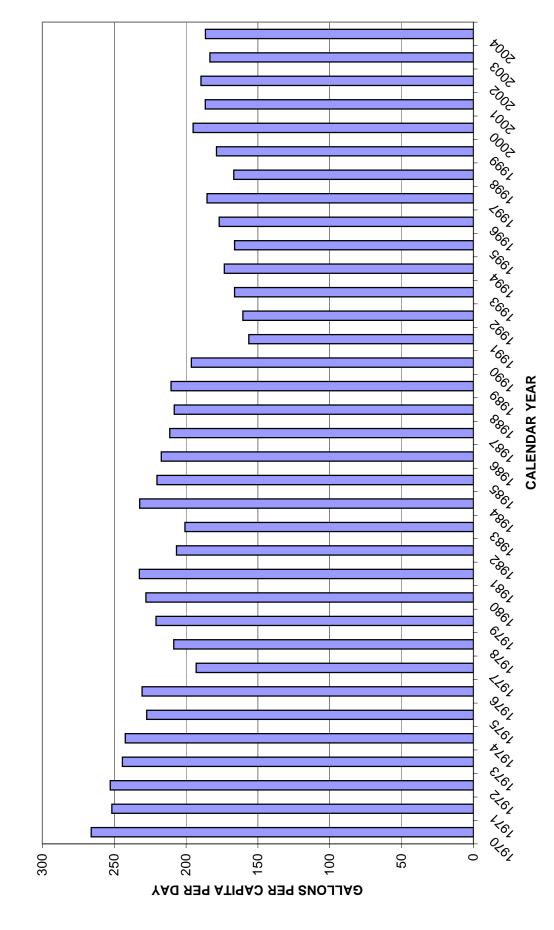
4 Water Demand History 11/4/2005

CITY OF BURBANK P.S.D. WATER DIVISION

ANNUAL WATER SALES, POPULATION, AND PER-CAPITA WATER USE CALENDAR YEARS 1970 - 2004

CALENDAR YEAR	WATER SALES	POPULATION	GALLONS PER
	(CCF)		CAPITA PER DAY
1970	11,534,360	88,871 census	266
1971	10,916,302	88,900	252
1972	10,931,540	88,400	253
1973	10,468,832	87,800	244
1974	10,310,562	87,200	242
1975	9,732,409	87,700	227
1976	9,704,560	86,000	231
1977	8,143,574	86,500	193
1978	8,754,220	86,000	209
1979	9,183,280	85,200	221
1980	9,436,162	84,625 census	228
1981	9,632,950	84,900	233
1982	8,712,371	86,400	207
1983	8,544,532	87,200	201
1984	9,991,664	87,900	232
1985	9,446,658	87,900	220
1986	9,370,021	88,400	217
1987	9,232,453	89,500	211
1988	9,335,032	91,600	208
1989	9,449,237	92,000	210
1990	8,968,737	93,643 census	196
1991	7,276,342	95,400	156
1992	7,629,536	97,200	160
1993	7,927,319	97,700	166
1994	8,389,975	99,200	173
1995	8,176,763	100,800	166
1996	8,777,860	101,400	177
1997	9,255,252	102,300	185
1998	8,455,660	103,900	167
1999	9,142,660	104,800	179
2000	9,574,629	100,316 census	195
2001	9,245,276	101,514	187
2002	9,518,332	102,883	190
2003	9,352,039	104,508	183
2004	9,628,221	105,477	187
2005		106,739	

GALLONS PER CAPITA PER DAY BASED ON METERED WATER SALES 1970-2004



11/8/2005

WATER SALES DATA AND NUMBER OF ACTIVE METERS BY CUSTOMER CLASSIFICATION (1975-2004)

CALENDAR YEAR	1975 METERS	5	1976 METERS	CCF	1977 METERS	CCF	1978 METERS	AC A	1979 METERS	CCF	1980 METERS	CCF
RESIDENTIAL	22,216	5,598,780	22,201	5,583,626	22,508	4,589,262	22,393	4,920,126	22,481	5,259,955	22,501	5,392,002
COMMERCIAL	2,829	1,993,900	2,889	2,064,836	2,966	1,834,320	2,971	1,924,285	3,000	1,989,748	3,003	1,973,795
INDUSTRIAL	150	1,672,520	157	1,608,254	166	1,306,203	184	1,515,395	166	1,540,464	169	1,656,570
CITY DEPTS.	199	437,140	205	421,669	189	405,211	190	384,278	186	383,941	185	403,653
FIRE PROT.	213	30,070	219	26,175	225	8,578	240	10,136	241	9,172	252	10,142
TOTAL	25,607	9,732,410	25,671	9,704,560	26,054	8,143,574	25,978	8,754,220	26,074	9,183,280	26,110	9,436,162
CALENDAR YEAR	1981		1982		1983		1984		1985		1986	
	METERS	CCF										
RESIDENTIAL	22,483	5,898,338	22,521	5,301,315	22,503	5,188,366	22,451	6,271,361	22,454	5,867,737	22,434	5,946,585
COMMERCIAL	3,010	2,038,750	3,020	1,924,585	3,009	1,944,667	3,048	2,118,564	3,048	2,123,675	3,023	2,065,745
INDUSTRIAL	159	1,337,213	160	1,108,608	163	1,095,551	164	1,185,588	163	1,059,864	164	971,062
CITY DEPTS.	188	341,942	188	370,251	188	309,203	193	407,626	201	388,403	196	376,607
FIRE PROT.	274	16,707	288	7,612	293	6,745	301	8,525	318	6,979	334	10,022
TOTAL	26,114	9,632,950	26,177	8,712,371	26,156	8,544,532	26,157	9,991,664	26,184	9,446,658	26,151	9,370,021
CALENDAR YEAR	1987		1988		1989		1990		1991		1992	
	METERS	CCF										
RESIDENTIAL	22,399	5,944,192	22,394	5,996,542	22,374	6,106,278	22,303	5,925,554	22,331	4,863,074	22,300	5,179,166
COMMERCIAL	3,036	2,088,438	3,052	2,066,583	3,038	2,094,616	3,035	2,014,293	3,024	1,679,338	3,027	1,681,952
INDUSTRIAL	162	928,852	161	1,011,743	162	806,650	156	636,247	161	414,253	196	325,573
CITY DEPTS.	195	261,862	198	253,199	197	433,754	201	381,984	205	314,853	206	437,201
FIRE PROT.	326	9,109	383	6,965	420	7,939	467	10,659	510	4,824	535	5,644
TOTAL	26,148	9,232,453	26,188	9,335,032	26,191	9,449,237	26,162	8,968,737	26,231	7,276,342	26,264	7,629,536
CALENDAR YEAR	1993		1994		1995		1996		1997		1998	
	METERS	CCF										
RESIDENTIAL	22,325	5,472,024	22,272	5,783,699	22,309	5,627,033	22,322	6,279,631	22,290	6,635,902	22,357	6,030,486
COMMERCIAL	3,016	1,703,179	3,007	1,741,257	3,014	1,743,652	3,029	1,806,078	3,016	1,876,887	3,015	1,740,552
INDUSTRIAL	171	316,884	166	329,745	148	319,722	139	323,268	151	359,412	147	350,383
CITY DEPTS.	208	431,560	208	532,349	210	482,615	206	365,317	218	377,284	217	330,226
FIRE PROT.	555	3,672	295	2,925	582	3,741	299	3,566	624	5,767	644	4,013
TOTAL	26,275	7,927,319	26,215	8,389,975	26,263	8,176,763	26,295	8,777,860	26,299	9,255,252	26,380	8,455,660
CALENDAR YEAR	1999		2000		2001		2002		2003		2004	
	METERS	CCF										
RESIDENTIAL	22,379	6,610,981	22,373	6,984,056	22,373	6,798,132	22,419	7,097,115	21,947	6,960,054	22,111	7,141,681
COMMERCIAL	3,022	1,838,408	3,035	1,863,822	3,028	1,796,337	3,049	1,742,874	3,120	1,769,507	3,097	1,876,429
INDUSTRIAL	151	357,469	145	365,954	144	354,254	145	343,976	155	349,747	122	334,526
CITY DEPTS.	211	326,305	215	354,120	224	288,901	233	326,498	234	265,300	200	267,509
FIRE PROT.	693	9,497	899	6,677	678	7,652	715	7,869	735	7,431	733	8,076
TOTAL	26,426	9,142,660	26,436	9,574,629	26,447	9,245,276	26,561	9,518,332	26,191	9,352,039	26,263	9,628,221

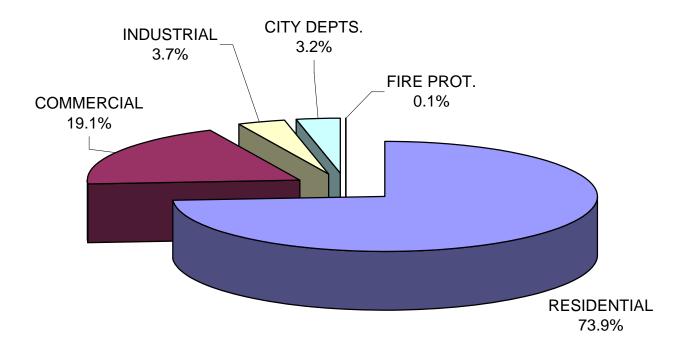
NOTE: VOLUME IS IN HUNDREDS OF CUBIC FEET (CCF)

CALENDAR YEAR	FIVE-YEAR	FIVE-YEAR AVERAGES
	CCF	Percent of Total
RESIDENTIAL	6,996,208	73.9%
COMMERCIAL	1,809,794	19.1%
INDUSTRIAL	349,691	3.7%
CITY DEPTS.	300,466	3.2%
FIRE PROT.	7,541	0.1%
TOTAL	9,463,699	100.0%

Meter numbers are from UBM-341 or Banner Water Fund Sales Analysis for June of the calendar year.

6 Sales by Class

WATER SALES BY CUSTOMER CLASSIFICATION AVERAGE OF 5 YEARS 2000 - 2004



%	61.9% 22.5% 10.8% 4.7% 0.1%	%	64.6% 22.1% 10.0% 3.2% 0.1%	%	63.7% 22.3% 10.9% 3.0% 0.1%	%	64.7% 22.5% 9.3% 3.4% 0.1%
TOTAL	5,901,682 2,139,301 1,026,315 451,823 7,771 9,526,892	TOTAL	6,109,892 2,090,484 947,405 303,671 8,239 9,459,691	TOTAL	5,922,309 2,072,081 1,015,734 276,520 10,167 9,296,811	TOTAL	5,970,933 2,079,602 857,479 317,972 6,125 9,232,111
NOC	593,078 179,521 85,210 50,619 687 909,115	NOC	582,668 186,417 79,636 33,133 592 882,446	NUC	603,023 189,496 76,228 40,844 323 909,914	NOC	587,559 186,147 67,732 53,011 608 895,057
MAY	543,814 186,817 80,740 46,548 553 858,472	MAY	594,458 182,812 80,765 26,495 600 885,130	MAY	473,289 168,190 180,478 29,537 362 851,856	MAY	514,035 174,742 61,312 33,574 739 784,402
APR	381,303 157,390 77,602 26,383 1,194 643,872	APR	464,637 172,161 75,703 20,376 599 733,476	APR	509,515 169,775 74,107 19,766 566 773,729	APR	515,853 175,549 71,817 42,446 702 806,367
MAR	322,118 149,233 73,668 23,841 1,612 570,472	MAR	355,072 150,634 68,838 9,742 545 584,831	MAR	416,707 160,713 69,936 15,297 932 663,585	MAR	382,860 152,820 58,635 22,627 354 617,296
FEB	371,579 152,832 82,974 19,178 426 626,989	FEB	379,955 154,066 67,881 13,250 492 615,644	FEB	379,333 148,448 67,821 15,134 1,670 612,406	FEB	342,995 153,152 60,288 8,867 638 565,940
JAN	390,599 150,721 74,432 20,211 559 636,522	JAN	389,008 155,163 78,146 10,848 420 633,585	JAN	362,048 148,274 69,281 7,924 453 587,980	JAN	375,004 155,505 63,803 32,750 425 627,487
DEC	354,946 160,354 82,532 17,447 483 615,762	DEC	440,736 160,047 71,588 16,066 346 688,783	DEC	378,344 155,374 69,192 7,509 815 611,234	DEC	414,920 158,828 67,369 8,581 381 650,079
NOV	415,013 166,422 95,780 40,279 435 717,929	NOV	456,738 170,613 82,374 16,783 1,435 727,943	NOV	355,247 165,286 75,709 8,690 700 605,632	NOV	444,287 169,143 67,463 12,876 376 694,145
OCT	494,434 173,798 88,029 42,409 352 799,022	OCT	442,084 180,490 85,317 23,806 400 732,097	OCT	524,865 183,306 80,661 21,581 1,472 811,885	OCT	515,479 182,006 92,028 25,446 475 815,434
SEP	659,292 274,955 102,824 44,844 439 1,082,354	SEP	647,518 194,298 88,980 36,801 1,078 968,675	SEP	602,274 198,140 81,566 35,765 725 918,470	SEP	630,466 191,154 90,489 21,217 482 933,808
AUG	654,838 195,655 98,177 58,834 512 1,008,016	AUG	647,174 197,297 84,364 45,932 1,102 975,869	AUG	678,168 192,352 87,177 36,907 546 995,150	AUG	607,764 195,588 80,850 29,042 487 913,731
JUL	720,668 191,603 84,347 61,230 519 1,058,367	JUL	709,844 186,486 83,813 50,439 630 1,031,212	JUL	639,496 192,727 83,578 37,566 1,603 954,970	JUL	639,711 184,968 75,693 27,535 458 928,365
FISCAL 85/86	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 86/87	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 87/88	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 88/89	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.

%	65.4% 22.2% 8.1% 4.2% 0.1%	%	66.5% 22.7% 6.5% 4.2% 0.1%	%	67.8% 22.6% 4.6% 4.9% 0.1%	%	68.1% 21.9% 4.2% 5.7% 0.1%
TOTAL	6,046,249 2,055,240 746,590 392,142 9,821 9,250,042	TOTAL	5,459,573 1,868,256 532,387 346,019 8,186 8,214,421	TOTAL	4,866,093 1,625,030 330,207 349,968 3,847 7,175,145	TOTAL	5,353,847 1,724,592 330,853 450,732 6,313 7,866,337
NOC	542,002 172,174 53,341 36,097 1,072 804,686	NOS	422,784 145,919 37,409 28,800 470 635,382	NON	484,370 147,823 27,958 48,949 218 709,318	NON	520,590 147,605 26,681 48,236 224 743,336
MAY	459,122 168,412 49,760 44,523 978 722,795	MAY	405,746 144,306 33,001 32,939 561 616,553	MAY	438,104 135,133 22,895 34,408 289 630,829	MAY	502,004 139,765 26,375 51,123 339 719,606
APR	426,971 164,271 52,306 21,495 826 665,869	APR	302,044 125,289 36,721 17,200 377 481,631	APR	323,629 123,228 19,196 21,531 320 487,904	APR	417,488 136,921 25,328 32,613 696 613,046
MAR	420,786 149,979 53,777 17,199 914 642,655	MAR	311,522 121,935 36,218 4,044 374 474,093	MAR	288,444 112,325 22,419 11,980 243 435,411	MAR	313,486 122,215 18,656 17,945 630 472,932
FEB	357,241 144,821 59,693 12,631 740 575,126	FEB	360,954 136,005 38,516 18,427 401 554,303	FEB	313,888 117,714 22,130 15,058 393 469,183	FEB	281,027 111,308 19,648 6,056 264 418,303
NAV	452,155 158,882 54,650 19,718 818 686,223	JAN	389,246 139,048 37,802 14,288 692 581,076	JAN	346,880 121,971 21,023 18,887 435 509,196	JAN	335,401 143,020 24,213 8,371 414 511,419
DEC	457,991 162,457 61,887 22,484 729 705,548	DEC	451,753 146,094 42,597 8,008 879 649,331	DEC	396,206 127,500 25,383 24,887 302 574,278	DEC	398,038 132,171 26,010 16,213 379 572,811
NOV	472,545 166,041 66,472 37,560 532 743,150	NOV	515,565 170,077 49,099 38,234 796 773,771	NOV	398,354 138,139 32,487 23,809 296 593,085	NOV	374,527 143,321 30,385 23,722 371 572,326
OCT	504,306 186,016 77,575 34,054 623 802,574	OCT	502,360 169,655 48,745 39,168 959 760,887	OCT	449,977 149,650 30,364 38,198 262 668,451	OCT	534,572 159,742 33,357 56,412 727 784,810
SEP	622,828 195,340 76,521 42,569 795 938,053	SEP	579,356 186,718 60,772 45,015 949 872,810	SEP	476,211 151,290 39,161 36,014 284 702,960	SEP	541,419 161,448 33,719 63,057 600 800,243
AUG	638,939 194,797 66,851 54,642 933 956,162	AUG	579,581 199,278 57,803 48,381 887 885,930	AUG	475,187 157,017 35,088 37,284 513 705,089	AUG	572,728 164,193 36,148 67,757 857 841,683
JUL	691,363 192,050 73,757 49,170 861 1,007,201	JUL	638,662 183,932 53,704 51,515 841 928,654	JUL	474,843 143,240 32,103 38,963 292 689,441	JUL	562,567 162,883 30,333 59,227 812 815,822
FISCAL 89/90	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 90/91	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 91/92	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 92/93	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT. TOTAL

%	69.0% 21.2% 4.0% 5.8% 0.0%	%	68.4% 21.4% 3.9% 6.3% 0.0%	%	70.3% 20.4% 3.7% 5.6% 0.0%	%	72.1% 20.3% 3.8% 3.8% 0.1%
TOTAL	5,572,321 1,714,833 321,727 467,929 2,286 8,079,096	TOTAL	5,507,345 1,720,418 315,112 507,234 3,364 8,053,473	TOTAL	6,181,634 1,793,706 322,829 492,969 4,121 8,795,259	TOTAL	6,565,357 1,846,109 343,143 349,074 4,692 9,108,375
NOS	509,923 151,418 27,310 61,663 182 750,496	NOC	514,947 148,972 25,792 54,332 447 744,490	NOC	610,951 166,759 30,385 43,189 268 851,552	NOC	650,089 170,320 34,834 38,316 228 893,787
MAY	409,583 139,901 24,362 34,833 123 608,802	MAY	241,068 137,290 23,364 37,332 271 439,325	MAY	582,656 154,723 24,957 44,894 265 807,495	MAY	630,049 164,411 28,229 41,883 361 864,933
APR	424,894 140,346 25,052 34,585 279 625,156	APR	366,369 138,485 23,054 31,308 240 559,456	APR	427,446 137,347 21,237 31,014 253 617,297	APR	546,354 150,193 26,085 34,847 564 758,043
MAR	365,250 128,030 19,178 25,756 171 538,385	MAR	305,288 123,908 21,244 15,438 173 466,051	MAR	343,659 124,386 18,419 17,056 254 503,774	MAR	441,457 127,943 21,647 26,602 634 618,283
FEB	345,008 117,833 24,026 18,884 233 505,984	FEB	346,281 116,173 16,534 20,852 251 500,091	FEB	365,329 127,010 19,368 20,467 591 532,765	FEB	367,111 137,311 20,569 17,056 513 542,560
NAL	415,635 134,960 25,816 24,992 193 601,596	JAN	419,986 126,821 21,123 16,336 238 584,504	JAN	418,499 131,478 19,852 29,332 369 599,530	JAN	399,206 131,556 22,729 11,005 826 565,322
DEC	423,917 140,608 24,899 29,295 152 618,871	DEC	404,690 135,135 21,608 28,589 427 590,449	DEC	435,072 139,508 25,802 21,591 226 622,199	DEC	414,405 135,852 25,835 18,725 283 595,100
NOV	442,557 145,448 27,775 33,414 154 649,348	NOV	416,899 136,309 30,335 35,777 208 619,528	NOV	479,646 155,657 28,715 33,693 255 697,966	NOV	486,609 146,829 28,050 18,043 264 679,795
OCT	491,623 148,251 31,068 36,041 137 707,120	OCT	559,447 54,682 32,758 42,329 296 689,512	OCT	556,587 160,262 32,958 42,724 312 792,843	OCT	592,484 165,498 31,752 37,974 203 827,911
SEP	579,560 156,788 31,788 57,977 253 826,366	SEP	564,220 267,257 37,374 80,210 308 949,369	SEP	671,191 173,894 39,900 61,841 592 947,418	SEP	672,771 168,470 36,600 43,050 262 921,153
AUG	560,119 156,289 30,696 57,545 211 804,860	AUG	714,609 169,860 30,553 84,211 305 999,538	AUG	574,668 160,948 32,328 76,767 457 845,168	AUG	679,220 179,677 37,085 55,075 312 951,369
JUL	604,252 154,961 29,757 52,944 198 842,112	JUL	653,541 165,526 31,373 60,520 200 911,160	JUL	715,930 161,734 28,908 70,401 279 977,252	JUL	685,602 168,049 29,728 6,498 242 890,119
FISCAL 93/94	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 94/95	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 95/96	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT. TOTAL	FISCAL 96/97	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT. TOTAL

%	71.3% 21.0% 4.1% 3.6% 0.0%	%	71.8% 20.1% 4.0% 3.9% 0.1%	%	72.6% 19.7% 3.8% 3.8% 0.1%	%	73.1% 19.5% 3.9% 3.4% 0.1%
TOTAL	6,061,819 1,784,489 344,831 305,903 4,162 8,501,204	TOTAL	6,380,124 1,786,335 358,621 349,954 6,781 8,881,815	TOTAL	6,949,159 1,883,735 363,303 361,608 7,845 9,565,650	TOTAL	6,835,380 1,827,574 365,850 318,532 7,508 9,354,844
NOS	514,776 143,991 26,718 32,183 514 718,182	NOC	560,751 155,001 27,361 31,868 1,173 776,154	NUC	688,497 167,316 33,211 43,517 434 932,975	NUC	649,840 162,302 32,627 29,544 568 874,881
MAY	436,859 137,103 24,633 21,924 420 620,939	MAY	492,711 143,032 25,551 24,862 1,267 687,423	MAY	582,523 148,257 22,522 32,991 388 786,681	MAY	568,753 147,525 25,068 29,880 355 771,581
APR	384,938 132,723 22,795 14,598 265 555,319	APR	437,084 138,919 24,743 15,911 468 617,125	APR	518,299 147,281 24,913 23,019 745 714,257	APR	463,913 140,526 25,719 16,243 435 646,836
MAR	345,621 115,661 18,857 14,118 (230) 494,027	MAR	428,729 134,714 21,128 15,724 322 600,617	MAR	390,457 132,850 20,638 13,403 405 557,753	MAR	423,102 124,062 21,229 10,915 319 579,627
FEB	164,562 118,785 19,161 6,074 180 308,762	FEB	383,225 124,567 21,221 10,695 643 540,351	FEB	423,316 130,589 24,252 14,761 286 593,204	FEB	405,444 126,661 22,641 12,768 1,383 568,897
NAL	613,427 141,073 27,348 9,431 372 791,651	JAN	507,321 138,886 27,746 18,996 416 693,365	JAN	544,907 154,153 28,048 25,668 379 753,155	JAN	488,271 143,122 26,196 18,421 408 676,418
DEC	398,546 132,489 25,620 16,106 218 572,979	DEC	467,795 137,075 25,759 20,176 324 651,129	DEC	537,452 149,805 28,859 26,681 657 743,454	DEC	571,962 143,748 29,662 21,193 1,451 768,016
NOV	515,856 154,951 34,858 19,051 281 724,997	NOV	491,223 146,566 33,807 20,525 346 692,467	NOV	557,470 163,576 35,135 27,163 254 783,598	NOV	506,303 150,412 31,576 18,827 430 707,548
OCT	598,065 173,439 36,732 38,639 870 847,745	OCT	574,918 157,840 37,003 34,215 308 804,284	OCT	619,325 167,844 37,581 34,134 765 859,649	OCT	579,923 163,405 37,837 25,334 439 806,938
SEP	711,237 181,468 39,706 41,562 482 974,455	SEP	672,552 170,657 40,027 51,875 514 935,625	SEP	693,708 178,232 37,317 40,044 1,183 950,484	SEP	680,774 175,887 39,863 35,129 392 932,045
AUG	678,856 176,320 36,969 44,000 462 936,607	AUG	704,668 174,269 43,488 52,750 429 975,604	AUG	697,878 176,651 36,422 40,766 1,203 952,920	AUG	757,479 174,239 35,773 59,697 892 1,028,080
JUL	699,076 176,486 31,434 48,217 328 955,541	JUL	659,147 164,809 30,787 52,357 571 907,671	JUL	695,327 167,181 34,405 39,461 1,146 937,520	JUL	739,616 175,685 37,659 40,581 436 993,977
FISCAL 97/98	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 98/99	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 99/00	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 00/01	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT. TOTAL

%	74.3% 18.6% 3.7% 3.3% 0.1%	%	74.8% 18.5% 3.6% 3.0% 0.1%	%	74.5% 18.8% 3.6% 3.0% 0.1%	%	73.0% 20.4% 3.8% 2.8% 0.1%
TOTAL	7,064,125 1,770,344 354,544 310,486 8,086 9,507,585	TOTAL	6,943,012 1,718,365 336,656 276,040 7,219 9,281,292	TOTAL	7,254,138 1,828,981 354,343 290,265 9,489 9,737,216	TOTAL	6,620,036 1,851,884 344,399 250,054 6,033 9,072,406
NOC	675,723 150,906 29,564 30,127 729 887,049	NON	653,700 148,919 29,083 23,506 674 855,882	NON	710,260 156,346 30,523 30,224 2,300 929,653	NON	643,632 154,982 28,628 21,703 760 849,705
MAY	620,926 145,919 26,881 40,274 740 834,740	MAY	540,755 136,946 26,313 20,178 560 724,752	MAY	744,314 153,491 25,704 24,588 179 948,276	MAY	537,042 146,425 26,206 21,537 786 731,996
APR	551,557 137,807 26,890 23,645 673 740,572	APR	522,892 120,241 23,756 78 488 667,455	APR	582,736 140,622 23,891 15,955 563 763,767	APR	480,554 141,632 24,369 12,120 380 659,055
MAR	495,192 126,942 24,553 19,755 622 667,064	MAR	410,302 116,899 19,980 14,682 497 562,360	MAR	421,431 125,835 20,549 12,532 780 581,127	MAR	402,374 121,172 19,973 20,258 470 564,247
FEB	463,003 128,116 22,372 12,271 510 626,272	FEB	462,872 134,107 23,521 12,101 501 633,102	FEB	453,176 130,654 23,561 14,137 634 622,162	FEB	387,725 129,012 40,538 9,057 436 566,768
JAN	458,915 128,515 23,510 13,284 628 624,852	JAN	520,692 136,584 23,797 18,353 532 699,958	JAN	493,380 146,222 26,818 16,427 854 683,701	JAN	432,325 135,402 21,205 11,733 435 601,100
DEC	436,730 131,860 26,146 10,760 509 606,005	DEC	525,308 140,608 27,934 15,551 601 710,002	DEC	542,427 137,071 24,511 24,445 619 729,073	DEC	477,842 149,842 21,380 12,605 864 662,533
NOV	541,880 152,210 32,304 20,600 882 747,876	NOV	518,827 146,027 27,209 22,952 572 715,587	NOV	498,860 162,408 32,247 25,014 532 719,061	NOV	443,556 146,025 23,897 14,181 186 627,845
OCT	611,870 159,228 32,633 30,508 886 835,125	OCT	624,835 160,796 34,901 25,170 718 846,420	OCT	678,131 171,512 36,577 32,639 827 919,686	OCT	607,413 171,222 34,308 28,420 394 841,757
SEP	721,458 169,380 39,551 30,624 1,006 962,019	SEP	739,610 165,929 31,663 38,274 776 976,252	SEP	708,943 174,085 41,372 36,407 1,035 961,842	SEP	733,958 184,807 33,490 32,405 320 984,980
AUG	754,513 174,170 35,172 41,731 390 1,005,976	AUG	722,220 156,815 37,214 39,285 632 956,166	AUG	732,825 177,187 39,278 33,784 496 983,570	AUG	736,449 190,173 35,573 33,170 466 995,831
JUL	732,358 165,291 34,968 36,907 511 970,035	JUL	700,999 154,494 31,285 45,910 668 933,356	JUL	687,655 153,548 29,312 24,113 670 895,298	JUL	737,166 181,190 34,832 32,865 536 986,589
FISCAL 01/02	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 02/03	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 03/04	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.	FISCAL 04/05	RESIDENTIAL COMMERCIAL INDUSTRIAL CITY DEPTS FIRE PROT.

APPENDIX D Water Demand Projections

Metropolitan Water District of Southern California

Average Year

Demographics (1)	2005	2010	2015	2020	2025	2030
Population	18,233,700	19,138,000	19,914,600	20,664,600	21,367,500	22,053,200
Occupied Housing Units	5,803,800	6,145,200	6,444,600	6,751,100	7,075,600	7,376,400
Single Family	3,477,300	3,651,000	3,767,600	3,945,800	4,128,700	4,250,100
Multi-Family	2,326,500	2,494,200	2,677,000	2,805,300	2,946,800	3,126,300
Persons Per Household	3.08	3.05	3.03	3.01	2.97	2.94
Urban Employment	8,186,200	8,991,300	9,402,700	9,795,200	10,163,000	10,537,600

Conservation	2005	2010	2015	2020	2025	2030
Total Conservation	735,900	865,200	955,200	1,027,600	1,106,900	1,188,300
Installed Active Devices Through 2004	91,200	85,800	63,200	23,000	900	100
IRP Conservation Target (2)	6,100	27,100	38,300	45,700	30,500	23,800
Code-Based and Price-Effect Savings (3)	388,600	502,300	603,700	708,900	825,500	914,400
Pre-1990 Conservation	250,000	250,000	250,000	250,000	250,000	250,000

Total Demands After Conservation	2005	2010	2015	2020	2025	2030
Total Demands	4,303,900	4,647,500	4,764,200	4,927,200	5,068,100	5,190,400
Retail Agricultural	347,800	318,800	285,000	250,500	215,000	194,600
Retail Municipal and Industrial	3,768,000	4,053,400	4,196,900	4,392,100	4,569,600	4,719,400
Groundwater Replenishment	140,100	200,400	212,800	215,100	214,000	206,900
Seawater Barrier	48,000	74,900	69,500	69,500	69,500	69,500

Local Supplies	2005	2010	2015	2020	2025	2030
Total Local Supplies	2,107,600	2,377,400	2,465,900	2,593,300	2,613,500	2,612,100
Groundwater	1,341,500	1,416,000	1,429,800	1,431,000	1,443,500	1,442,300
Surface Water	59,400	100,000	99,500	99,200	99,200	98,600
Los Angeles Aqueduct	373,300	252,500	253,000	252,900	253,200	253,600
IRP Local Resource Program Target	0	12,800	33,000	38,300	37,500	37,500
Groundwater Recovery	60,500	81,700	82,100	85,300	85,300	85,300
Total Recycling	221,000	328,800	350,900	376,400	377,200	377,200
M&I and Agricultural	152,300	180,900	204,000	229,500	230,300	230,300
Groundwater Replenishment	52,000	90,000	90,000	90,000	90,000	90,000
Sea Water Barrier	16,800	57,900	56,900	56,900	56,900	56,900
Other Imported Supplies	51,900	185,600	217,600	310,100	317,600	317,600

Demands on Metropolitan	2005	2010	2015	2020	2025	2030
Total Metropolitan Demands	2,196,100	2,270,100	2,298,300	2,334,000	2,454,500	2,578,300
Full Service (Tier I and Tier II)	1,918,900	2,007,000	2,039,100	2,085,400	2,225,400	2,364,800
Replenishment Water Rate (4)	167,500	169,200	179,700	182,800	183,100	176,800
Interim Agricultural Water Program	109,700	93,900	79,500	65,800	46,000	36,700
Firm Demands on Metropolitan (5)	1.996.000	2.073.000	2.095.000	2.131.000	2,258,000	2.390.000

All units are acre-feet unless specified, rounded to the nearest hundred

Totals may not sum due to rounding
(1) Growth Projections: SCAG 2004 Regional Transportation Plan; SANDAG 2030 Forecast

⁽²⁾ The 2030 savings target is derived from the 2003 IRP Update forecast projections for 2030; it is not an official target for 2030.

⁽³⁾ Measured from 1990; Includes plumbing codes for pre-rinse spray heads and high efficiency washing machines

⁽⁴⁾ Replenishment Water Rate demands include: seasonal shift, groundwater spreading, and groundwater in-lieu

⁽⁵⁾ Firm demand on Metropolitan equals Full Service demands plus 70% of the Interim Agricultural Water Program demands

City of Burbank

Average Year

Demographics (1)	2005	2010	2015	2020	2025	2030
Population	106,800	110,000	114,700	119,500	124,000	128,300
Occupied Housing Units	42,300	44,300	46,200	48,100	50,000	52,000
Single Family	20,900	21,300	21,800	22,800	23,700	24,300
Multi-Family	21,400	23,000	24,400	25,400	26,300	27,700
Persons Per Household	2.50	2.46	2.47	2.47	2.46	2.45
Urban Employment	90,700	102,700	109,300	115,500	121,100	126,100

Conservation	2005	2010	2015	2020	2025	2030
Conservation (2)	2,700	3,600	4,300	5,000	5,600	6,200
Installed Active Devices Through 2004	700	600	400	100	0	0
Code-Based and Price-Effect Savings	2,000	3,000	3,900	4,900	5,600	6,200

Total Demands After Conservation	2005	2010	2015	2020	2025	2030
Total Demand	25,200	29,200	30,100	31,300	32,300	32,900
Retail Agricultural	0	0	0	0	0	0
Retail Municipal and Industrial (3)	25,200	27,200	28,000	29,100	30,100	30,700
Groundwater Replenishment	0	2,000	2,100	2,200	2,200	2,200
Sea Water Barrier	0	0	0	0	0	0

Local Supplies	2005	2010	2015	2020	2025	2030
Total Local Supplies	11,500	11,500	11,500	11,600	11,600	11,600
Groundwater	0	0	0	0	0	0
Surface Water	0	0	0	0	0	0
Los Angeles Aqueduct	0	0	0	0	0	0
Groundwater Recovery	10,000	10,000	10,000	10,000	10,000	10,000
Total Recycling	1,500	1,500	1,500	1,600	1,600	1,600
M&I and Agricultural	1,500	1,500	1,500	1,600	1,600	1,600
Groundwater Replenishment	0	0	0	0	0	0
Seawater Barrier	0	0	0	0	0	0
Other Imported Supplies	0	0	0	0	0	0

Demands on Metropolitan	2005	2010	2015	2020	2025	2030
Total Matuanalitan Damanda	12.700	17.700	10 500	10.000	20.700	21 200
Total Metropolitan Demands	13,700	17,700	18,500	19,800	20,700	21,300
Full Service (Tier I and Tier II)	13,700	15,700	16,400	17,600	18,500	19,100
Replenishment Water Rate (4)	0	2,000	2,100	2,200	2,200	2,200
Interim Agricultural Water Program	0	0	0	0	0	0

Notes:

All units are acre-feet unless specified, rounded to the nearest hundred

Totals may not sum due to rounding

⁽¹⁾ Growth Projections: SCAG 2004 Regional Transportation Plan; SANDAG 2030 Forecast

⁽²⁾ Includes code-based, price-effect and existing active savings through 2004; does not include future active conservation savings Code-based conservation includes plumbing codes for pre-rinse spray heads and high-efficiency washing machines

⁽³⁾ The retail M&I projections include existing active conservation through 2004, but do not include future active conservation savings

⁽⁴⁾ Replenishment Water Rate demands include: seasonal shift, groundwater spreading, and groundwater in-lieu

City of Burbank

Supplies and Demands for UWMP 2005
by Adjusting MWD's Projections using Population and Local Supply Changes

	Present		Projected Under Normal Weather	nder Norm	al Weather	
	2002	2010	2015	2020	2025	2030
MWD's Total Retail Demand (all M&I)	25,200	27,200	28,000	29,100	30,100	30,700
less - MWD's Recycled Use Projection	1,500	1,500	1,500	1,500	1,500	1,500
equals - MWD Potable Projection	23,700	25,700	26,500	27,600	28,600	29,200
MWD Population	106,800	110,000	114,700	119,500	124,000	128,300

City of Burbank Population (given 2005 and 2030)	106,739	110,391	114,043	117,696	121,348	125,000
Potable scaled down from MWD for lower population	23,686	25,791	26,348	27,183	27,988	28,449
Increase in Potable from Population Growth		2,105	222	835	802	461
Potable Projection	22,500	24,790	25,350	26,180	26,990	27,450
plus - Recycled Water- Irrigation (2005 Use)	220	220	220	220	220	220
plus - Recycled Water-Power Plant	230	1,700	1,700	1,700	1,700	1,
equals - Total Retail Demand (All Uses)	23,600	27,060	27,620	28,450	29,260	29,720

Fresh Water Demand (Potable and Recycled Irrigation)	23,070	25,360	25,920	26,750	27,560	28,020
less - Recycled Irrigation w/ System Expansion	220	1,100	1,150	1,250	1,400	1,450
equals - Potable Demand on MWD and Local GW	22,500	24,260	24,770	25,500	26,160	26,570
less - Lake Street GAC Production	0	0	0	0	0	0
less - Burbank Operable Unit Production	6,500	12,500	12,500	12,500	12,500	12,500
equals - Potable Demand on MWD (Treated)	16,000	11,760	12,270	13,000	13,660	14,070

Local Groundwater Pumping and Treatment	6,500	12,500	12,500	12,500	12,500	12,500
Groundwater Return Credits	4,700	5,100	5,200	5,400	2,600	5,700
Replenishment Demand on MWD	1,800	7,400	7,300	7,100	6,900	6,800

20,870	
20,560	
20,100	
19,570	
19,160	
17,800	
d Replenishment)	
(Treated an	
Demand on MWD (
Fotal	

NOTES:

2005 USES ACTUAL QUANTITIES THROUGH AUGUST/SEPTEMBER 2005 AND PROJECTED THROUGH DECEMBER.

FUTURE YEARS START WITH MWD ESTIMATES OF TOTAL RETAIL DEMAND.

CITY OF BURBANK POPULATION USES 2030 POPULATION FROM COB PLANNING, INTERMEDIATE YEARS ARE INTERPOLATED.

MWD DEMAND ESTIMATES ARE THEN ADJUSTED DOWNWARD BASED ON LOWER COB 2030 POPULATION ESTIMATE

22,500 AF 2005 POTABLE IS BEST ESTIMATE OF ACTUAL, WHILE FUTURE YEARS START FROM 22,687 AVERAGE OF PAST FIVE YEARS

ADJUSTMENTS ARE MADE FOR BURBANK'S LATEST ESTIMATES OF RECYCLED WATER AND LOCAL

GROUNDWATER PRODUCTION.

RECYCLED WATER FOR POWER PLANT IS KEPT SEPARATE, SINCE IT MAY VARY WITHOUT AFFECTING THE POTABLE DEMAND.

APPENDIX E Burbank Water and Power Rules and Regulations Pertaining to Water Demand Management

1.11 Continuity of Service

- 1.11 (a) BWP will exercise diligence and make all reasonable efforts to furnish and deliver a continuous and sufficient supply of utility service to avoid any shortage and prevent interruptions to service. When such interruptions occur, BWP will endeavor to re-establish service with the shortest possible delay consistent with the safety of its Staff, its Customers and the general public.
- 1.11 (b) Whenever BWP finds it necessary to schedule an interruption of service, it will, where feasible, notify all Customers to be affected by the interruption, stating the approximate time and anticipated duration of the interruption. Scheduled interruptions will impose the least inconvenience to Customers, consistent with reasonable utility operations.
- 1.11 (c) During times of threatened or actual water or electricity shortages due to a natural disaster or circumstances out of BWP's control, BWP will apportion its available supplies among its Customers. The BWP General Manager or his/her designee will make that final decision after consulting with the appropriate authorities. BWP will apportion the supply in the manner that appears to be most equitable under circumstances then prevailing and with due regard to public health and safety.

4.01 Water Conservation Plan

4.01 (a) Pursuant to Sections 10616 through 10656 of the California Water Code and to the Department and City Council, Burbank has adopted an Urban Water Management Program which contains Burbank's water conservation measures, including metering, leak detection, public education, public information, home retrofit devices, landscape irrigation program, reuse program, rate structures, drought management plan and other programs.

4.10 Provision of Water Service

- 4.10 (a) BWP shall endeavor to render a dependable supply of potable water in quantities adequate to meet the reasonable needs of its Customers.
- 4.10 (b) BWP shall endeavor to maintain operating pressures at the service connection of not less than 25 pounds per square inch. Pressures may be lower at times of maximum demand or because of unusual elevations or other special conditions.
- 4.10 (c) The Customer is advised that in order to protect public water supplies, certain acts are by state law misdemeanors and in some instances punishable by imprisonment in the county jail or state prison. State law in this regard includes, but is not limited to, the following:

Section 498 Penal Code: This section includes stealing water, as well as diverting other utilities illegally and taking water after service has been disconnected and the meter sealed, including unauthorized connection to fire hydrants.

Section 588 Penal Code: This section addresses permitting willful or neglectful seepage or overflow of water on adjacent lands, public or private roads or highways.

Sections 4450 to 4457 Health and Safety Code: These sections address acts which lead to the pollution of any conduit or reservoir.

APPENDIX F Burbank City Code Sections Pertaining to Water Demand Management

- 1. Pedestrian circulation paths must be provided to connect the following on-site and off-site locations and features:
 - a. Common building/project entries and individual unit entries
 - b. Parking garages and surface parking areas
 - c. Bicycle parking areas
 - d. Common open space areas including play areas, recreation areas, and sitting areas
 - e. Trash collection areas
 - f. Public sidewalks
 - g. Transit stops
- 2. Pedestrian paths must have a minimum width of 48 inches and must be improved with a decorative paved surface, brick, pavers, or similar material approved by the Director.
- 3. If a pedestrian path is included on one or more sides of a vehicle driveway, access aisle, or parking area, such path must be differentiated from the vehicle circulation area by a change in color, material, and/or texture.
- N. **Landscaping.** Landscaping must be provided for every lot, yard, open space area, and parking area as provided in this Subsection. For the purposes of this Subsection, "landscape area" means an area covered with soil and planted with trees, shrubs, turf/lawn, or other vegetation, including permanent planters.
- 1. A minimum percentage of the area of each lot must be landscape area as specified in Table 31-628(A). All landscape area, including landscaping within common open space areas, may be used to satisfy this requirement.
- 2. When abutting or adjacent to a single family zoned property, a minimum percentage of each required front, rear, and side yard area must be landscape area. The minimum percentage of landscape area within each individual yard is the same as the minimum percentage of landscape area required for the lot.
 - 3. All landscape areas must provide minimum soil depths as follows:
 - a. 12 inches for areas planted with turf or ground cover
 - b. 18 inches for planters and areas planted with shrubs and similar vegetation
 - c. 3 feet for planters or areas planted with trees
 - 4. Each planter and landscape area must have no dimension or diameter less than three feet.
- 5. No more than 35 percent of the total landscape area of the lot as a whole may be occupied by turf or lawn. The remaining landscape area must be occupied by ground cover, vines, ornamental grasses, small shrubs, and/or seasonal flowering plants. All landscape area not occupied by turf or ground cover must be covered with mulch to reduce water evaporation and consumption and weed growth.
- 6. At least 50 percent of the total landscape area of the lot as a whole must be planted with shrubs at a rate of one shrub per 10 square feet.
 - 7. Trees must be provided in all yard areas as follows:
- a. Trees must be provided at a rate of one tree per 40 linear feet of yard space. The required number of trees must be calculated separately for each yard area, subject to normal rounding procedures.
- b. Notwithstanding the number of trees required by Subsection a, no less than one tree must be provided for each of the front, interior side, and street-facing side yards and no less than two trees must be provided for the rear yard.
- c. One or more of the trees in both the front and street-facing side yards must be at least 48-inch box size; all other trees must be at least 24-inch box size.
- d. Trees in front yard areas must be complementary to street trees as determined by the Park, Recreation, and Community Services Director.
 - 8. All required common open space areas must be landscaped as follows:
- a. Common open space areas must have a minimum percentage of landscape area as specified in Table 31-628(A). If common open space is provided in more than one area, each individual area must provide the minimum percentage of landscape area.
 - b. All landscape areas within common open space areas must be accessible by pedestrians.
- c. Trees must be provided in common open space areas at a rate of one tree per 600 square feet of open space area, subject to normal rounding procedures. If common open space is provided in more than one area, the

number of required trees must be calculated using the collective total of common open space area. The required number of trees may be distributed among the common open space areas at the discretion of the applicant with Director approval.

- d. At least one half of the required trees must be at least 24-inch box size. All other trees must be at least 15-gallon size.
 - 9. All buffer areas required by Section 31-628(F) must be landscaped as follows:
 - a. All non-hardscaped areas within the buffer area must be landscaped.
- b. At least one 24-inch box tree must be provided every 15 linear feet along any lot line that abuts or is adjacent to a single family zoned property.
- c. The landscaping and trees required within the buffer area may be counted toward satisfying the overall landscaping and tree requirements for the project. If the buffer area is used to satisfy a common open space requirement, the landscaping and trees may also be counted toward satisfying the common open space landscaping and tree requirements.
- 10. All outdoor driveways, surface parking areas, and vehicle circulation areas must be landscaped as follows:
- a. On lots of 12,000 square feet or more, a landscape strip with a minimum width of three feet must be provided between any driveway, parking area, or circulation area and any structure or property line, except where vehicle access occurs.
- b. On lots of 12,000 square feet or more, at least one 24-inch box tree must be provided for every three uncovered parking spaces. Such trees must be located within the three foot landscaped strip required per Subsection a.
- c. All parking garages and carports must provide a landscape planter with a minimum size of three feet by three feet between every two parking spaces or single-width door openings, or between every double-width door opening.
- 11. All planters must be constructed of permanent masonry or concrete construction. All planters must provide drainage directly into a drainage system.
- 12. All landscape areas must include a permanent fully automatic irrigation system. Irrigation systems must utilize water conservation design concepts including but not limited to low-flow sprinkler heads and bubblers, drip systems, zone separation, microclimate considerations, and moisture sensors. Irrigation systems may operate only between the hours of 9 p.m. and 6 a.m.
- 13. All landscaping, as planted pursuant to the approved landscaping plans, and related irrigation systems, must be properly maintained in reasonably good condition, and any weeds or decayed or dead vegetation shall be removed. This requirement applies at all times during the life of the project, and it shall be unlawful for any landowner, and person having leaving, occupying or having charge or possession of any property to violate this provision.
- 14. All landscaping must be designed and installed so as to reach maturity within five years of the planting date.
- 15. Landscaping plans demonstrating compliance with the landscaping requirements must be prepared by a registered landscape architect. Final species selection and placement of all trees and vegetation must be approved by the Community Development Director and the Park, Recreation, and Community Services Director.

O. Tree and archaeological site preservation.

- 1. Trees. Existing parkway and on-site trees must be preserved in place and incorporated into the design of a project to the extent feasible. Preserved on-site trees may be credited toward satisfaction of the landscaping requirements of this Section. If preserving trees in place is not feasible, the applicant must comply with one of the following options, subject to approval by the Community Development Director. These options must be applied independently to parkway and on-site trees.
- a. Trees may be relocated to another location. Trees relocated on-site may be credited toward satisfaction of the landscaping requirements of this Section.

Sec. 31-2003. Community Facilities Element of the General Plan.

The Community Development Director shall cause the preparation and submission to the Planning Board and the City Council for review, consideration, and adoption of a Community Facilities Element of the General Plan by July 31, 1989. Such Element shall establish City-wide public facility standards for development approval and establish specific performance criteria for the completion of public facilities and provision of public services in the City.

[Adopted by voters at a Referendum Election held February 28, 1989 (Ord. No. 3129).]

Sec. 31-2004. Comprehensive Development Standards for Multi-Family Residential Projects.

The Community Development Director shall cause the preparation of and submission to the Planning Board and the City Council for review, consideration, and adoption of Comprehensive Development Standards for Multi-Family Residential Projects, by July 1, 1989. Such ordinance shall establish standards and criteria addressing at least the following attributes of such projects:

- (1) Site and architectural design quality which may be indicated by the harmony of the proposed buildings in terms of size, height, tiering, setbacks, color, and location with existing neighborhood development.
 - (2) The amount and character of open space landscaping.
- (3) Site and architectural design quality which may be indicated by the arrangement of the site for efficiency of circulation, on and off-site traffic safety, and privacy.
 - (4) The provision of public and/or private usable open space.
- (5) Contributions to and extension of existing systems of foot or bicycle paths, equestrian trails, and facilities and/or greenbelts.
- (6) The provision of needed public facilities, such as critical linkages in the major street system, schoolrooms, functional parks, or other vital public facilities.
- (7) Site and architectural design quality which may be indicated by the amount in character of modification of the topography of the site.
 - (8) Absence of deleterious impact on trees and archeological sites.
 - (9) The provision of significant water conservation features.
- (10) The provisions of energy generation and conservation features, such as additional insulation, housing siting and design, solar techniques and other innovative techniques.
 - (11) Absence of deleterious impact on the physical and/or aesthetic environment.
- (12) Design and features which contribute significantly to the economic feasibility of producing housing at the lowest possible cost given economic and environmental factors, the public health, and safety, and the need to facilitate the development of housing for persons of low or moderate income.

[Adopted by voters at a Referendum Election held February 28, 1989 (Ord. No. 3129).]

Sec. 31-2005. Interim Criteria for Multi-Family Residential Projects.

Pending preparation and adoption of the Comprehensive Standards specified in Sec. 31-2004, all multi-family residential projects in the City must be reviewed and approved as conditional uses. In addition to the usual criteria for conditional uses, the Planning Board must find that the project is compatible with adjacent land uses in accordance with the criteria identified in Sec. 31-2004.

[Adopted by voters at a Referendum Election held February 28, 1989 (Ord. No. 3129).]

interior partitions which are not permanent nor anything else not excluded above.

- (2) Conditional Use Permit-Restaurants. By conditional use permit, the City may approve a reduction in the minimum parking requirement for restaurants which can prove, to the satisfaction of the Planning Board, that the restaurant will primarily serve a walk-in trade due to the nature of the proposed restaurant and its proximity to large concentrations of employment. An Employee Parking Plan shall be submitted to the Director of Community Development as part of Development Review performed on any restaurant west of Pass Avenue on Riverside Drive which requires development review.
 - (e) SITE LANDSCAPING FOR NON-RESIDENTIAL USES.
 - (1) Trees.
- (i) Trees shall be planted in areas of public view adjacent to and along side and rear building lines. The standard shall be one tree for every 20 linear feet of front and exposed side yard. The applicant shall submit a landscaping plan prepared by a licensed landscape architect for review and approval of the Parks and Recreation Director.
- (ii) All required trees shall be a minimum 24-inch box size, unless otherwise approved by the Director of Parks and Recreation. Five gallon trees may be substituted for 15 gallon trees at a 2:1 ratio at the discretion of the Director of Parks and Recreation.
 - (2) Maintenance and Irrigation Equipment.
- (i) All landscape areas shall be maintained in a healthy and growing condition and shall require regular pruning, fertilizing, mowing and trimming.
 - (ii) All landscape areas shall be kept free of weeds and debris.
- (iii) All irrigation systems shall be kept operable, including adjustments, replacements, repairs and cleaning as part of regular maintenance.
 - (iv) Damaged planting and irrigation equipment will be repaired or replaced within 30 days.
- (3) Screening. Combinations of berming, landscaping, walls and buildings shall be used to screen loading areas, storage areas, trash enclosures and utilities from public view. When used as a screen, the landscaping shall be of adequate maturity to reach the height and density sufficient to provide the necessary screening within 18 months of installation to the satisfaction of the Director of Public Works.
 - (4) All Areas. Except as otherwise permitted herein, all setback and non-paved areas shall be landscaped.
- (5) Drought Resistant Plants. Drought-tolerant and low-water requiring plant materials are encouraged for purposes of water conservation.
- (6) Construction. If construction of a phase will not begin within one year following completion of the previous phase, areas proposed for development in the future shall be temporarily turfed, seeded, and irrigated with an automatic sprinkler system for dust and soil erosion control. If construction begins within one year, the area shall be irrigated as necessary to prevent dust.
- (7) Stake Trees. All trees shall be staked with a double steel pipe and seared with rubber or plastic strip or other commercial tie material. Wire shall not be used to tie the tree to the stakes.
- (8) Mounds. Graded mounds shall not exceed a 3:1 slope. Mounds over 30" high shall not be placed within ten feet of any street and/or alley intersection.
 - (9) Planters. All landscaping planters shall have a minimum dimension of five (5) feet.
- (10) Irrigation Systems. All landscaped areas shall be provided with an irrigation system approved by the Parks and Recreation Director consisting of waterlines and sprinklers designed to provide head to head coverage and to minimize overspray onto structures, walks and windows.
- (11) Exemptions. At the discretion of the Community Development Director, a barrier-free, four-foot wide paved walk may be provided through the required planter at street and driveway intersections to provide unencumbered access for the handicapped from the sidewalk to the parking lot. Such walks shall be located so as to facilitate the most direct movement of persons using sidewalk curb ramps, if such are provided. Bus shelters may be located within this planter, if approved by the Community Development Director and the Parks and

APPENDIX G Model Incremental Water Conservation Resolution

RESOLUTION NO.

A RESOLUTION OF THE COUNCIL OF THE CITY OF BURBANK ADOPTING AN INCREMENTAL WATER CONSERVATION PROGRAM.

THE COUNCIL OF THE CITY OF BURBANK FINDS:

- A. The City of Burbank (City) is a municipal corporation of the State of California and is an original member agency of the Metropolitan Water District of Southern California (MWD).
- B. Burbank's primary sources of water are locally-produced ground water, and water imported from the State Water Project and the Colorado River by the Metropolitan Water District of Southern California.
- C. Under portions of the California Urban Water Management Planning Act (California Water Code, Division 6, Part 2.6. Urban Water Management Planning), the City is required to adopt an Urban Water Management Plan. This plan is to include an urban water shortage contingency analysis with a draft water shortage contingency resolution. An Incremental Water Conservation Program (IWCP) was previously adopted as Resolution No. 23,217 of City Council on February 26, 1991. It terminated on December 31, 1993.
- D. Water supply conditions exist from time to time that may require the reduction of the City's consumption of water.
- E. MWD's Drought Management Plan, adopted November 8, 1994, included a modified Incremental Interruption and Conservation Plan (IICP). The City's IWCP matches the phased implementation of the MWD plan.
- F. The critical nature of the water supply available to Burbank makes it necessary to reduce water consumption in order to protect and conserve the water supply and to lessen the demand on the remaining water in storage.
- G. It is desirable and in the best interests of the water users within Burbank's City limits to conserve and protect the existing water supplies against waste and unreasonable uses by adopting an Incremental Water Conservation Program.

H. An incremental program encompassing both voluntary and mandatory conservation measures to reduce water use will best achieve the goal of conserving the water supply without causing unnecessary adverse economic consequences.

THE COUNCIL OF THE CITY OF BURBANK RESOLVES:

I. SCOPE

The following measures of the Incremental Water Conservation Program are requested to be taken by all water users within the Burbank City Limits.

II. POLICY

Because of the water resource conditions prevailing within areas of the state and elsewhere from which the City obtains its water supplies through the Metropolitan Water District of Southern California, it is desirable and in the general welfare of the City that the water resources available to the City be put to maximum beneficial use to the extent they are capable, and that waste, unreasonable use or unreasonable method of use be prevented, and that conservation of such water resources be exercised in a reasonable and beneficial manner for the people of Burbank.

III. PURPOSE

The purpose of this Resolution is to provide for an Incremental Water Conservation Program to minimize the effect of a shortage of water resources to the customers and people of the City, and to adopt provisions that will reduce unnecessary consumption and wasteful use of water over an extended period of time, thereby reducing the hardship to the City's customers and people.

IV. DEFINITIONS

The following words and phrases, whenever used in this Resolution, shall have the following meaning:

- A. "MWD" shall mean the Metropolitan Water District of Southern California.
- B. "Base Period" shall mean that period of time over which the "Base" is computed.
- C. "Base" shall mean the amount of water used on a customer's premises during a corresponding billing period.
- D. "Base Year" shall mean the calendar year 1989.
- E. "Billing Unit" shall mean the unit amount of water used to apply for the purpose of calculating charges for water usage and equals one hundred cubic feet or seven hundred and forty-eight (748) gallons of water.
- F. "**Drought Surcharge**" shall mean that charge applied to the amount of water used above the Phase Allocation, excluding the Base Line Allocation.
- G. "Phase Allocation" shall mean that amount of water usage to which no Drought Surcharges are applied.
- H. "**Phase**" shall mean that phase of the Incremental Water Conservation Program declared by the City Council.
- I. "Base Line Allocation" shall mean that stipulated amount of water usage for residential customers to which Drought Surcharges do not apply.
- J. "Effective Date" shall mean that date on which provisions of the Incremental Conservation Program shall commence through application of the Phase Allocation and Drought Surcharge in the utility billing system.

- K. "Process Water" means that water used by either Commercial or Industrial customers designated by Burbank Water and Power to manufacture, alter, convert, clean, heat, or cool a product, or equipment used for that purpose; water used for power production; water used for plant and equipment washing and for transporting raw materials and products; and water used in the process of manufacturing food and food products.
- L. "Department" shall mean Burbank Water and Power.

V. APPLICATION

The provisions of this Resolution shall apply to all potable water customers within the City Limits and shall also apply to all property and facilities owned, maintained, operated or under the jurisdiction of, the various boards, departments or agencies of the City.

VI. INCREMENTAL WATER CONSERVATION PHASES

A. VOLUNTARY REDUCTION ADVISORY

The following water use restrictions are requested on a voluntary basis and will not be subject to Phase Allocation or Drought Surcharges.

- 1. Do not hose-wash driveways, patios, sidewalks, walkways, parking areas or other paved areas, except as it is required for sanitary purposes. Use a broom or blower instead.
- 2. Install water-saving devices in indoor plumbing. Conservation kits, as available, will be made available free of charge by Burbank for this purpose. The kits contain shower flow restrictors, a toilet displacement bag, and dye tablets to check for leaks.
- 3. Install and use pool and spa covers to reduce evaporation.
- 4. Check faucets, toilets and pipes, both indoors and outdoors for leaks and repair them immediately.
- 5. Do not irrigate lawns and landscaping between the hours of

10:00 a.m. and 4:00 p.m. Do not overwater.

- 6. Adjust sprinklers and irrigation systems to eliminate overspray, runoff and waste. Avoid watering on windy days.
- 7. Parks, school grounds and golf courses should not be watered between the hours of 10:00 a.m. and 5:00 p.m.
- 8. Do not allow the hose to run while washing motor vehicles, trailers, boats or other mobile equipment. Use a bucket or an automatic shutoff on the hose.
- 9. When installing new landscaping, plant low water demand trees and plants. Avoid large turf areas, which consume large quantities of water.
- 10. Developers of commercial and industrial properties are required to use low water use landscaping plants and designs to provide for permanent water conservation.
- 11. Developers and home builders are required to use low flush (3.5 gallons/flush) or ultra low flush (1.6 gallons/flush) toilets in new construction.
- 12. Restaurants, hotels, cafes, cafeterias or other public places where food is sold, served, or offered for sale, shall not serve drinking water to any customer unless specifically requested. The City will provide informational table placards free of charge.

B. PHASE I - 5% REDUCTION

- 1. No use of water may be made contrary to the provisions of Section VI., A.
- 2. No customer shall make, cause, use, or permit the use of water from the City for any purpose in an amount in excess of the Phase I Allocation of ninety-five percent (95%) of the amount used in the Base Year.

C. PHASE II - 10% REDUCTION

- 1. No use of water may be made contrary to the provisions of Section VI., A.
- 2. No customer shall make, cause, use, or permit the use of water from the City for any purpose in an amount in excess of the Phase II Allocation of ninety percent (90%) of the amount used in the Base Year.

D. PHASE III - 15% REDUCTION

- 1. No use of water may be made contrary to the provisions of Section VI., A.
- 2. No customer shall make, cause, use, or permit the use of water from the City for any purpose in an amount in excess of the Phase III Allocation of eighty-five percent (85%) of the amount used in the Base Year, except that Process Water used by Commercial or Industrial customers may be used to the extent of ninety percent (90%) of the amount used in the Base Year.

E. PHASE IV - 20% REDUCTION

- 1. No use of water may be made contrary to the provisions of Section VI., A.
- 2. No customer shall make, cause, use, or permit the use of water from the City for any purpose in an amount in excess of the Phase IV Allocation of eighty percent (80%) of the amount used in the Base Year, except that process Water used by Commercial or Industrial customers may be used to the extent of ninety percent (90%) of the amount used in the Base Year.

F. PHASE V - 25% REDUCTION

1. No use of water may be made contrary to the provisions of Section VI., A.

2. No customer shall make, cause, use, or permit the use of water from the City for any purpose in an amount in excess of the Phase V Allocation of seventy-five percent (75%) of the amount used in the Base Year, except that Process Water used by Commercial or Industrial customers may be used to the extent of eighty five percent (85%) of the amount used in the Base Year.

G. PHASE VI - 30% REDUCTION

- 1. No use of water may be made contrary to the provisions of Section VI., A.
- 2. No customer shall make, cause, use, or permit the use of water from the City for any purpose in an amount in excess of the Phase VI Allocation of seventy percent (70%) of the amount used in the Base Year, except that Process Water used by Commercial or Industrial customers may be used to the extent of eighty five percent (85%) of the amount used in the Base Year.

H. WATER SERVICE RESTRICTIONS

No property shall be provided water service by the City unless such person has acquired a vested right to connect to the water system prior to the Effective Date of Phase IV of this Resolution. A person has a vested right for water service to a particular property within the meaning of this section if, prior to the Effective Date of Phase IV, that property is already provided water service(s) through existing service line(s) from the water system, that person has paid all required fees and charges for water service to the property, has obtained a building permit to improve the property, or has obtained a development agreement from the City.

- 1. Any property with a vested right to water service, which desires to have its existing service size and capacity increased, shall have its Base Year use limited to the prior service connection(s).
- 2. The water service restriction shall not apply to the provision of fire services.

3. The water service restrictions shall not apply during Phase I through Phase III.

Customers who can demonstrate an extreme hardship with respect to this section may obtain administrative review by the General Manager, Burbank Water and Power. This does not guarantee administrative relief, only provides the opportunity to apply for administrative relief. The General Manager may approve a development agreement which provides for a development fee to provide water resources from conservation, reclamation, treatment, or development of new water resources to offset the increased water demand. This will result in no net gain to existing water usage.

I. EXCEPTIONS

- 1. The prohibited use of water in subsections B through G are not applicable to the use of water necessary to preserve the public health and safety or for essential governmental services such as police, fire, sanitation and other similar emergency service. Hospitals, convalescent hospitals, and senior or developmentally disabled residential care facilities are also excepted. It is expected however, that best efforts to reduce water use will be made by excepted customers.
- 2. This Resolution shall not be applicable to services receiving Recycled Water.

VII. INCREMENTAL CONSERVATION PHASE IMPLEMENTATION

A. PHASE IMPLEMENTATION

Burbank Water and Power shall monitor and evaluate the projected water supply, MWD requirements, and City demands for water by its customers monthly and shall recommend to the City Manager the extent of the conservation required. The City Manager shall notify and recommend to the City Council the appropriate Phase of water conservation to be implemented. The Phase implementation shall be made by Council Resolution. The Incremental Conservation Program provisions shall be implemented on the

Effective Date with the first full billing period commencing on or after the date of approval of the Resolution of the City Council.

B. BASE LINE ALLOCATION

Nothing contained in Section VI, B through G shall be deemed to require any single family residential customer to reduce his consumption of water to less than ten (10) billing units per month at each water meter during any billing period while the Phase Allocation is in effect. Multi-family residential customers shall not be required to reduce water consumption of water to less than eight (8) billing units per dwelling unit (with an electric meter) at each water meter while the Phase Allocation is in effect. The Base Line Allocation establishes the floor below which no Drought Surcharge will apply. Customers at or below the Base Line Allocation are not required to further conserve water.

C. DROUGHT SURCHARGE

1. Purpose

A Drought Surcharge shall be applied to all water use above the Phase Allocation. The Drought Surcharge shall be adjusted monthly in order to compensate the Department for any MWD disincentive charges added to its purchased water cost, for any additional City conservation measures required, and administration of the Incremental Conservation Program. The Drought Surcharge shall be calculated to the nearest five mills (\$0.005).

2. Formula

The Drought Surcharge shall be determined in accordance with the following formula:

Drought Surcharge (mills per unit) =

3. General

The Drought Surcharge shall appear on the first billing statement immediately following the period in which the excess occurred and which available financial information from the MWD has been obtained to determine the surcharge.

4. Definitions

- a. **MWDDC** equals MWD Disincentive Charges and shall mean those charges to the City imposed by the MWD for water use above the City's monthly allocation.
- b. **ACM** equals Additional Conservation Measures and shall mean those additional conservation measures or activities necessary to administer the Incremental Conservation Program.
- c. **CF** equals Correction Factor and shall mean any over or under cumulative collection of the Drought Surcharge experienced by the City during prior months and shall be derived from City accounting records.
- d. **MWD** Use shall mean the quantity of water delivered to the City in any month by the MWD.
- e. **MWD Allocation** shall mean that quantity of water allocated to the City in any month by the MWD under its Incremental Interruption and Conservation Plan.

D. BASE RATE ADJUSTMENT

The water base rate is composed of the Water Availability Charge, the Demand Charge and the Quantity Charge. The Quantity Charge and the Demand Charge shall be adjusted to compensate for the short-fall in revenue collected resulting from reduced sales by implementing the Incremental Water Conservation Program. The Quantity Charge and the Demand Charge shall be adjusted by multiplying the appropriate rate by the Adjustment Factor as follows:

<u>PHASE</u>	PERCENT REDUCTION	ADJUSTMENT FACTOR
I	5%	1.053
II	10%	1.111
III	15%	1.176
IV	20%	1.250
V	25%	1.333
VI	30%	1.429

The Base Rates shall be adjusted on the Effective Date with the first full billing period commencing on or after the date of approval of the Resolution of the City Council.

E. FAILURE TO COMPLY

It shall be unlawful for any customer of the department to fail to comply with the provisions of this Resolution. The application of the Drought Surcharge and the Base Rate Adjustment shall be additional to any other penalty provided in this Resolution.

VIII. COMPLIANCE RELIEF

A. ADMINISTRATIVE RELIEF

Any customer who is dissatisfied with the application of any of the provisions of this Resolution as they relate to the customer, may seek relief as set forth below:

- 1. Upon the filing of a customer of an Application for Relief as herein provided, the Department shall take such steps as it deems reasonable and necessary to resolve the Application for Relief prior to the submission of the Application to an appeal board.
- 2. In determining whether relief shall be granted, the Department and the Appeals Board shall take into consideration all the relevant factors including, but not limited to:
 - a. Whether any additional reduction in water consumption will result in unemployment;
 - b. Whether any additional members have been added to the household of a single family residential customer;
 - c. Changes in vacancy factors in multi-family housing;
 - d. Increased number of employees in commercial, industrial and governmental offices;
 - e. Increased production requiring increased Process Water;
 - f. Water uses during new construction;
 - g. Adjustments of water use caused by emergency or health hazards;
 - h. First filling of a permit-constructed swimming pool;
 - i. Water use necessary for reasons relating to family illness or health.
- 3. No relief shall be granted to any customer for any reason in the absence of a customer showing that he has achieved the maximum practicable reduction in water consumption in his residential, commercial, industrial or governmental water consumption.

- 4. No relief shall be granted to any customer who, when requested by the Department, fails to provide the information whereby the services provided to him can be classified for the purpose of establishing an appropriate base or classification.
- 5. If a resolution of the Application for Relief is mutually agreedupon between the Department and the customer, the Agreement and the fact of adherence shall be in writing and subscribed to by the customer. No other appeal may be taken by the customer on the same, or substantially similar, circumstances and fact.
- 6. A decision of the Department shall become final fifteen (15) days after the decision unless an appeal to the Water Conservation Appeals Board is filed.

B. BASE USE ADJUSTMENT

Any customer who was not a customer on the premises for which service was billed by the Department during the Base Year shall be assigned the same water use for such a similar premises, and the Department shall have the further discretion to adjust the Base Year use in the event such customer's use of the premises is substantially different from the previous use during the Base Year.

C. WATER CONSERVATION APPEALS BOARD

The Burbank Water and Power Board shall sit as an Appeals Board in all cases where a customer has filed an Application for Relief from the provisions of this Resolution and has failed to resolve the application with the Burbank Water and Power Customer Service Manager. The Board members shall adopt such rules and regulations as they, in their discretion, deem reasonable and necessary to the formation procedure and operation of the Water Conservation Appeals Board.

IX. GENERAL PROVISIONS

A. COMMERCIAL AND INDUSTRIAL CUSTOMERS

All Commercial and Industrial customers of the Department using 25,000 billing units per year or more shall submit a Water Conservation Plan to the General Manager, Burbank Water and Power. The Water Conservation Plan shall be submitted within ninety (90) days after approval of the Incremental Water Conservation Program Resolution by the City Council. The Plan shall address, at a minimum: existing water use, existing conservation measures, conservation measures to be implemented, potential for reclaimed water use and a proposed schedule for implementing additional water conservation measures. These customers shall submit quarterly reports to the General Manager's office on the progress of their Water Conservation Plan. Failure to submit a Water Conservation Plan within the specified period will result in a penalty of \$1,000.00 per month for which the Water Conservation Plan has not been filed.

Commercial and Industrial customers must request to be considered for the "Process Water" use designation by Burbank Water and Power. Such customers must submit a letter request describing their Process Water use as defined in this Resolution to the General Manager, Burbank Water and Power.

B. CITY DEPARTMENTS

The Parks and Recreation Department and the Public Works Department shall prepare and submit to the City Manager a Water Conservation Plan and monthly reports. The monthly reports are to present the progress of their Water Conservation Plan and level of performance compared to their prior year's water use.

Burbank Water and Power shall not flush its water mains and fire hydrants except as necessary to protect the public health. Its reservoir drainage and maintenance will be deferred, except as necessary for emergency or public health. The power plant(s) will make optimum use of reclaimed water for cooling purposes.

X. RESOLUTION DURATION

IWCP Resolution.doc

	fective on the date shown below and shall unless extended, rescinded, or revised by the
City Council at an earlier date.	
PASSED and ADOPTED this _	day of,
	Mayor of the City of Burbank
Attest:	
City Clerk	

11/2/05

APPENDIX H Best Management Practices Report

Water Supply & Reuse				
Reporting Unit: City of Burbank, PSD		Year: 2003		
Water Supply Source Information				
Supply Source Name	Quantity (AF) Supplied	Supply Type		
MWD of SC	12097.7	Imported		
Valley/BOU	9912.3	Groundwater		
Burbank WRP	569.9	Recycled		

Total AF: 22579.9

Accounts & Water Use

Reporting Unit Name: Submitted to CUWCC Year: City of Burbank, PSD 11/23/2004 2003

A. Service Area Population Information:

1. Total service area population 104400

B. Number of Accounts and Water Deliveries (AF)

Туре	Metered		Unme	Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)	
1. Single-Family	19930	9563	0	0	
2. Multi-Family	2017	6376	0	0	
3. Commercial	3120	3945	0	0	
4. Industrial	155	773	0	0	
5. Institutional	207	634	27	.7	
6. Dedicated Irrigation	0	0	0	0	
7. Recycled Water	50	570	0	0	
8. Other	735	17	0	0	
9. Unaccounted	NA	702	NA	0	
Total	26214	22580	27	.7	

Metered Unmetered

Reported as of 11/4/05

no

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2003

A. Implementation

- 1. Based on your signed MOU date, 07/21/1992, your Agency STRATEGY DUE 07/21/1994 DATE is:
- 2. Has your agency developed and implemented a targeting/ marketing strategy for no SINGLE-FAMILY residential water use surveys?
 - a. If YES, when was it implemented?
- 3. Has your agency developed and implemented a targeting/ marketing strategy for MULTI-FAMILY residential water use surveys?

a. If YES, when was it implemented?

B. Water Survey Data		
Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	0	0
2. Number of surveys completed:	0	0
Indoor Survey:		
3. Check for leaks, including toilets, faucets and meter checks	no	no
 Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary 	no	no
 Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as neccesary; replace leaking toilet flapper, as necessary 	no	no
Outdoor Survey:		
6. Check irrigation system and timers	no	no
7. Review or develop customer irrigation schedule	no	no
Measure landscaped area (Recommended but not required for surveys)	no	no
Measure total irrigable area (Recommended but not required for surveys)	no	no
 Which measurement method is typically used (Recommended but not required for surveys) 		Other
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	no	no
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	no	no

None

a. If yes, in what form are surveys tracked?

b. Describe how your agency tracks this information.

C. Water Survey Program Expenditures				
	This Year	Next Year		
Budgeted Expenditures	0	0		
2. Actual Expenditures	0			
D. "At Least As Effective As"				

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

BMP 02: Residentia	l Plumbing	Retrofit
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Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2003

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts?

no

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

2. Has your agency satisfied the 75% saturation requirement for single-family housing units?

no

3. Estimated percent of single-family households with low-flow showerheads:

18%

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units?

no

5. Estimated percent of multi-family households with low-flow showerheads:

31%

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices?

yes

a. If YES, when did your agency begin implementing this strategy?

3/1/1991

b. Describe your targeting/ marketing strategy.

Billing Insert

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	92	178
3. Number of toilet-displacement devices distributed:	2	4
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	174	339
6. Does your agency track the distribution and cost of low-flow devi-	ces?	yes
a. If YES, in what format are low-flow devices tracked?		Database

b. If yes, describe your tracking and distribution system:

MS Excel/Access Conservation Database

C. Low-Flow	Device Distribution Expenditures	

	This Year	Next Year
Budgeted Expenditures	3000	3000
2. Actual Expenditures	3000	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 03	: System	Water	Audits,	Leak	Detection	and	Repair
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Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2003

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year? yes

2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:

a. Determine metered sales (AF)

21307

b. Determine other system verifiable uses (AF)

0

c. Determine total supply into the system (AF)

22010

d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required.

0.97

3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production?

yes

4. Did your agency complete a full-scale audit during this report year?

no

5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit?

no

6. Does your agency operate a system leak detection program?

no

a. If yes, describe the leak detection program:

B. Survey Data

1. Total number of miles of distribution system line.

266

2. Number of miles of distribution system line surveyed.

0

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2003

A. Implementation

1. Does your agency require meters for all new connections and bill by volume-of-use?

2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use?

no

yes

- a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed?
- b. Describe the program:
- 3. Number of previously unmetered accounts fitted with meters during report year.

0

B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?

no

- a. If YES, when was the feasibility study conducted? (mm/dd/yy)
- b. Describe the feasibility study:
- 2. Number of CII accounts with mixed-use meters.

3482

3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period.

0

C. Meter Retrofit Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

There is no separate class for landscape meters, so all CII meters are counted as mixed use in B2 above. Many of them have little or no landscaping. Some of the largest landscape meters have been converted to reclaimed.

BMP 05: Large Landscape Conservation Reporting Unit:		
Reporting Unit: City of Burbank, PSD	BMP Form Status: 100% Complete	Year: 2003
A. Water Use Budgets		
1. Number of Dedicated Irrigation Meter Accou	nts:	
2. Number of Dedicated Irrigation Meter Accou	nts with Water Budgets:	
3. Budgeted Use for Irrigation Meter Accounts	with Water Budgets (AF):	
4. Actual Use for Irrigation Meter Accounts with	n Water Budgets (AF):	
5. Does your agency provide water use notices billing cycle?	s to accounts with budgets each	n
B. Landscape Surveys		
 Has your agency developed a marketing / ta surveys? 	rgeting strategy for landscape	n
a. If YES, when did your agency begin i	mplementing this strategy?	
b. Description of marketing / targeting st	trategy:	
2. Number of Surveys Offered.		
3. Number of Surveys Completed.		
4. Indicate which of the following Landscape El	lements are part of your survey:	
a. Irrigation System Check		n
b. Distribution Uniformity Analysis		n
c. Review / Develop Irrigation Schedule	s	n
d. Measure Landscape Area		n
e. Measure Total Irrigable Area		n
f. Provide Customer Report / Information	n	n
5. Do you track survey offers and results?		n
Does your agency provide follow-up surveysa. If YES, describe below:	for previously completed surveys?	n

C. Other BMP 5 Actions

 An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? 	no
2. Number of CII mixed-use accounts with landscape budgets.	0
3. Do you offer landscape irrigation training?	no
4. Does your agency offer financial incentives to improve landscape water use efficiency?	no

Type of Financial Incentive:	Budget (Dollars/ Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	0	0	0

5. Do you provide landscape water use efficiency information to new customers and customers changing services?

a. If YES, describe below:

6. Do you have irrigated landscaping at your facilities?

yes

No

a. If yes, is it water-efficient?

no

b. If yes, does it have dedicated irrigation metering?

no

7. Do you provide customer notices at the start of the irrigation season?

no

8. Do you provide customer notices at the end of the irrigation season?

no

D. Landscape Conservation Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

F. Comments

Burbank has few large landscaped areas mostly schools, parks, and two shopping centers. Since 1992, the reclaimed water system has been expanded to serve several of the largest landscaped areas including the golf course. BWP is currently working on further reclaimed water system expansion.

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2003

A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers?

a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

Offered by the Metropolitan Water District. Amount to the customer is \$100. Based on the efficiency rating listed on CEE qualifying product list.

2. Does your agency offer rebates for high-efficiency washers?

yes

yes

3. What is the level of the rebate?

180.27

4. Number of rebates awarded.

332

B. Rebate Program Expenditures

	This Year	Next Year
Budgeted Expenditures	45000	61000
2. Actual Expenditures	59850	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Rebate level is based on purchase price of Washer, A3 above is the average of 332 rebates.

yes

BMP 07: Public Information Programs

Reporting Unit:

BMP Form Status: Year: City of Burbank, PSD 2003 100% Complete

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation?

a. If YES, describe the program and how it's organized.

Public information programs encompass direct information mailers, Civic group meetings, community education workshops, Speakers Bureau presentations, School Outreach education and instruction, Town Hall Meetings, the City cable TV channel, BWP's website, billing inserts, and newspaper advertising. Programs include ULFT and Efficient Washing Machine rebates, free showerhead and aerator distribution, and free landscaping classes.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	1
b. Public Service Announcement	yes	400
c. Bill Inserts / Newsletters / Brochures	yes	4
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	yes	6
g. Speaker's Bureau	yes	21
 h. Program to coordinate with other government agencies, industry and public interest groups and media 	yes	

B. Conservation Information Program Expenditures		
	This Year	Next Year
Budgeted Expenditures	15500	15500
2. Actual Expenditures	15500	
C. "At Least As Effective As"		

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 08: Schoo	I Education	Programs
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Reporting Unit:

City of Burbank, PSD

BMP Form Status: **100% Complete**

Year: **2003**

A. Implementation

1. Has your agency implemented a school information program to promote water conservation?

yes

2. Please provide information on your school programs (by grade level):

Grade	Are grade- appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	12	235	0
Grades 4th-6th	yes	9	253	0
Grades 7th-8th	no	0	0	0
High School	no	0	0	0
3. Did your Agency's materials meet state education framework requirements?				yes
4. When did your Agency begin implementing this program?				10/22/1996

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	8000	8000
2. Actual Expenditures	8000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

oorting Unit: y of Burbank, PSD	BMP Form Status: 100% Complete		Year: 2003
mplementation			
1. Has your agency identified and ranked COMMER use?	CIAL customers	according to	ye
2. Has your agency identified and ranked INDUSTR use?	IAL customers ad	ccording to	n
3. Has your agency identified and ranked INSTITUT use?	TONAL customer	s according to	n
Option A: CII Water Use Survey and Custome	er Incentives P	rogram	
4. Is your agency operating a CII water use survey a program for the purpose of complying with BMP 9 un		entives	ye
CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	6	0	
b. Number of New Surveys Completed	6	0	
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	
CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	yes	no	n
f. Evaluation of all water-using apparatus and processes	yes	no	n
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	n
Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h. Rebates	0	132	14900
i. Loans	0	0	0
j. Grants	0	0	0
	0	0	0

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option?	yes
6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings?	yes
7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.	13.1
8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.	31.54

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 09a: CII ULFT Water Savings

Reporting Unit: City of Burbank, PSD

BMP Form Status: 100% Complete

Year: **2003**

1. Did your agency implement a CII ULFT replacement program in the reporting year?

Yes

If No, please explain why on Line B. 10.

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program? Check all that apply.

Potential savings

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

BWP does not target CII customers.

2. How does your agency advertise this program? Check all that apply.

Bill insert Bill message Newsletter Web page

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

BWP does not target CII customers. This is part of the ULFT Rebate Program.

B. Implementation

Does your agency keep and maintain customer participant information? (Read Yes the Help information for a complete list of all the information for this BMP.)
 Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency?
 What is the total number of customer accounts participating in the program during the last year?

CII Subsector	Number of Toilets Replaced					
4.	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount	Type Not Specified	
a. Offices	15	0	0		0 0	
b. Retail / Wholesale	0	0	0		0 0	
c. Hotels	0	0	0	(0 0	
d. Health	0	0	0	(0 0	
e. Industrial	0	0	0	(0 0	

f. Schools: K to 12	0	0	0	0	0
g. Eating	0	0	0	0	0
h. Govern- ment	0	0	0	0	0
i. Churches	1	0	0	0	0
j. Other	0	0	0	0	0

5. Program design.

Rebate or voucher

6. Does your agency use outside services to implement this program?

No

- a. If yes, check all that apply.
- 7. Participant tracking and follow-up.

Site Visit

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

a. Disruption to business	1
b. Inadequate payback	1
c. Inadequate ULFT performance	1
d. Lack of funding	1
e. American's with Disabilities Act	1
f. Permitting	1
g. Other. Please describe in B. 9.	5

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other isues affecting program implementation or effectiveness.

Customers who did not know about the program did not participate.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

BWP does not target CII customers.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Expenditure
a. Labor	0	0
b. Materials	0	0
c. Marketing & Advertising	0	0
d. Administration & Overhead	0	0
e. Outside Services	0	0
f. Total	0	0

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency	900
contribution	
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	900

BMP 11: Conservation Pricing

Reporting Unit:

BMP Form Status: Year: City of Burbank, PSD 2003 100% Complete

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Non-volumetric Flat Rate

c. Total Revenue from Volumetric Rates \$9334207

d. Total Revenue from Non-Volumetric Charges,

Fees and other Revenue Sources

\$1448502

2. Commercial

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Uniform

c. Total Revenue from Volumetric Rates \$2322664

d. Total Revenue from Non-Volumetric Charges,

Fees and other Revenue Sources

\$205920

3. Industrial

a. Water Rate Structure **Uniform Seasonal**

b. Sewer Rate Structure Uniform c. Total Revenue from Volumetric Rates \$462431

d. Total Revenue from Non-Volumetric Charges,

Fees and other Revenue Sources

\$10230

4. Institutional / Government

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Uniform c. Total Revenue from Volumetric Rates \$385731

d. Total Revenue from Non-Volumetric Charges,

Fees and other Revenue Sources

\$15444

5. Irrigation

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Uniform

c. Total Revenue from Volumetric Rates \$0

d. Total Revenue from Non-Volumetric Charges.

Fees and other Revenue Sources

\$0

6. Other

a. Water Rate Structure Uniform b. Sewer Rate Structure Uniform c. Total Revenue from Volumetric Rates \$21424

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources

\$483772

B. Conservation Pricing Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

BWP has no irrigation customer class. "Other" consists of fire service.

BMP	12.	Conser	vation (Coord	linator
	16.	COLISCI	vation '		

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2003

A. Implementation

1. Does your Agency have a conservation coordinator? yes

2. Is this a full-time position?

3. If no, is the coordinator supplied by another agency with which you cooperate in a no regional conservation program?

4. Partner agency's name:

c. Coordinator's Title

5. If your agency supplies the conservation coordinator:

a. What percent is this conservation coordinator's position? 50%

b. Coordinator's Name

Mary Forrest

Senior Conservation Advisor

d. Coordinator's Experience and Number of Years

15

e. Date Coordinator's position was created (mm/dd/yyyy)

1/1/1998

6. Number of conservation staff, including Conservation
Coordinator.

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	15500	15500
2. Actual Expenditures	15500	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 13:	Water	Waste	Pro	hibition
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Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2003

A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area?

no

a. If YES, describe the ordinance:

2. Is a copy of the most current ordinance(s) on file with CUWCC?

no

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding

b. Single-pass cooling systems for new connections

no

no

c. Non-recirculating systems in all new conveyor or car wash systems

no

d. Non-recirculating systems in all new commercial laundry systems

no

e. Non-recirculating systems in all new decorative fountains

no

f. Other, please name

no

2. Describe measures that prohibit water uses listed above:

None

Water Softeners:

- 3. Indicate which of the following measures your agency has supported in developing state law:
 - a. Allow the sale of more efficient, demand-initiated regenerating DIR models.

yes

b. Develop minimum appliance efficiency standards that:

i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used.
ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced.
c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.

4. Does your agency include water softener checks in home water audit programs?

no

5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models?

no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

On-site regeneration of water softeners is prohibited.

135

no

BMP 14: Residential ULFT Replacement Programs

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2003

A. Implementation

	Single-Family Accounts	Multi-Family Units
 Does your Agency have program(s) for replacing high-water- using toilets with ultra-low flush toilets? 	yes	yes
Number of Toilets Replaced by Agency Program During Report	Year	
Replacement Method	SF Accounts	MF Units
2. Rebate	268	135
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	0	0

Total

268

6. Describe your agency's ULFT program for single-family residences.

ULFT Rebate Program

7. Describe your agency's ULFT program for multi-family residences.

ULFT Rebate Program

8. Is a toilet retrofit on resale ordinance in effect for your service area?

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

B. Residential ULFT Program Expenditures

	This Year	Next Year
Budgeted Expenditures	160000	160000
2. Actual Expenditures	28673.12	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Water Supply & Reuse		
Reporting Unit: City of Burbank, PSD		Year: 2004
Water Supply Source Information	tion	
Supply Source Name	Quantity (AF) Supplied	Supply Type
MWD of SC	14547.2	Imported
Valley/BOU	8949.1	Groundwater
Burbank WRP	536.7	Groundwater

Total AF: 24033

Accounts & Water Use

Reporting Unit Name: Submitted to CUWCC Year: City of Burbank, PSD 11/23/2004 2004

A. Service Area Population Information:

1. Total service area population 105400

B. Number of Accounts and Water Deliveries (AF)

Туре	Metered		Metered U		Unme	etered
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)		
1. Single-Family	19944	9992	0	0		
2. Multi-Family	2167	6661	0	0		
3. Commercial	3037	4199	0	0		
4. Industrial	122	813	0	0		
5. Institutional	172	666	28	.8		
6. Dedicated Irrigation	0	0	0	0		
7. Recycled Water	61	537	0	0		
8. Other	733	22	0	0		
9. Unaccounted	NA	1142	NA	0		
Total	26236	24032	28	.8		

Metered Unmetered

Reported as of 11/4/05

no

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2004

A. Implementation

1. Based on your signed MOU date, 07/21/1992, your Agency STRATEGY DUE 07/21/1994 DATE is:

2. Has your agency developed and implemented a targeting/ marketing strategy for no SINGLE-FAMILY residential water use surveys?

a. If YES, when was it implemented?

3. Has your agency developed and implemented a targeting/ marketing strategy for MULTI-FAMILY residential water use surveys?

a. If YES, when was it implemented?

B. Water Survey Data		
Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	0	0
2. Number of surveys completed:	0	0
Indoor Survey:		
3. Check for leaks, including toilets, faucets and meter checks	no	no
 Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary 	no	no
 Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as neccesary; replace leaking toilet flapper, as necessary 	no	no
Outdoor Survey:		
6. Check irrigation system and timers	no	no
7. Review or develop customer irrigation schedule	no	no
8. Measure landscaped area (Recommended but not required for surveys)	no	no
Measure total irrigable area (Recommended but not required for surveys)	no	no
 Which measurement method is typically used (Recommended but not required for surveys) 		Other
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	no	no
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	no	no

None

a. If yes, in what form are surveys tracked?

b. Describe how your agency tracks this information.

C. Water Survey Program Expenditures		
	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	
D. "At Least As Effective As"		

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 02: Residential Plumbing Retrofit

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2004

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts?

no

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

2. Has your agency satisfied the 75% saturation requirement for single-family housing units?

no

3. Estimated percent of single-family households with low-flow showerheads:

19%

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units?

no

5. Estimated percent of multi-family households with low-flow showerheads:

32%

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices?

yes

a. If YES, when did your agency begin implementing this strategy?

3/1/1991

b. Describe your targeting/ marketing strategy.

Billing Insert

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	178	345
3. Number of toilet-displacement devices distributed:	4	8
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	293	568
6. Does your agency track the distribution and cost of low-flow device	es?	yes
a. If YES, in what format are low-flow devices tracked?		Database

b. If yes, describe your tracking and distribution system:

MS Excel/Access Conservation Database

C. Low-Flow Device Distribution Expenditures		
	This Year	Next Year
1. Budgeted Expenditures	3000	3000

2. Actual Expenditures 3000

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

0

no

0

No

BMP 03	: System	Water	Audits,	Leak	Detection	and	Repair
---------------	----------	-------	---------	------	-----------	-----	--------

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2004

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year? yes

2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:

a. Determine metered sales (AF) 22353.6

b. Determine other system verifiable uses (AF)

c. Determine total supply into the system (AF) 23496.3

d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / 0.95 Total Supply is < 0.9 then a full-scale system audit is required.

3. Does your agency keep necessary data on file to verify the values used to yes calculate verifiable uses as a percent of total production?

4. Did your agency complete a full-scale audit during this report year? no

5. Does your agency maintain in-house records of audit results or the completed no AWWA audit worksheets for the completed audit?

6. Does your agency operate a system leak detection program?

a. If yes, describe the leak detection program:

B. Survey Data

1. Total number of miles of distribution system line.

2. Number of miles of distribution system line surveyed.

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:

100% Complete 2004

A. Implementation

1. Does your agency require meters for all new connections and bill by volume-of-use?

yes

2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use?

no

- a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed?
- b. Describe the program:
- 3. Number of previously unmetered accounts fitted with meters during report year.

0

B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?

no

- a. If YES, when was the feasibility study conducted? (mm/dd/yy)
- b. Describe the feasibility study:
- 2. Number of CII accounts with mixed-use meters.

3331

3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period.

0

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

There is no separate class for landscape meters, so all CII meters are counted as mixed use in B2 above. Many of them have little or no landscaping. Some of the largest landscape meters have been converted to reclaimed.

BMP 05: Large Landscape Conservation Benerting Unit:		
Reporting Unit: City of Burbank, PSD	BMP Form Status: 100% Complete	Year: 2004
A. Water Use Budgets		
1. Number of Dedicated Irrigation Meter Accou	nts:	
2. Number of Dedicated Irrigation Meter Accou	nts with Water Budgets:	
3. Budgeted Use for Irrigation Meter Accounts	with Water Budgets (AF):	
4. Actual Use for Irrigation Meter Accounts with	n Water Budgets (AF):	
5. Does your agency provide water use notices billing cycle?	s to accounts with budgets each	n
B. Landscape Surveys		
 Has your agency developed a marketing / ta surveys? 	rgeting strategy for landscape	n
a. If YES, when did your agency begin i	mplementing this strategy?	
b. Description of marketing / targeting st	trategy:	
2. Number of Surveys Offered.		
Number of Surveys Completed.		
4. Indicate which of the following Landscape El	lements are part of your survey:	
a. Irrigation System Check		n
b. Distribution Uniformity Analysis		n
c. Review / Develop Irrigation Schedule	s	n
d. Measure Landscape Area		n
e. Measure Total Irrigable Area		n
f. Provide Customer Report / Information	n	n
5. Do you track survey offers and results?		n
Does your agency provide follow-up surveysa. If YES, describe below:	for previously completed surveys?	n

C. Other BMP 5 Actions

 An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? 	no
2. Number of CII mixed-use accounts with landscape budgets.	0
3. Do you offer landscape irrigation training?	no
4. Does your agency offer financial incentives to improve landscape water use efficiency?	no

Type of Financial Incentive:	Budget (Dollars/ Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	0	0	0

5. Do you provide landscape water use efficiency information to new customers and customers changing services?

a. If YES, describe below:

6. Do you have irrigated landscaping at your facilities?

yes

No

a. If yes, is it water-efficient?

no

no

b. If yes, does it have dedicated irrigation metering?

no

7. Do you provide customer notices at the start of the irrigation season?8. Do you provide customer notices at the end of the irrigation season?

no

D. Landscape Conservation Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

F. Comments

Burbank has few large landscaped areas mostly schools, parks, and two shopping centers. Since 1992, the reclaimed water system has been expanded to serve several of the largest landscaped areas including the golf course. BWP is currently working on further reclaimed water system expansion.

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2004

A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer yes rebates for high-efficiency washers?

a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

Offered by the Metropolitan Water District. Amount to the customer is \$100. Based on the efficiency rating listed on CEE qualifying product list.

2. Does your agency offer rebates for high-efficiency washers?

yes

3. What is the level of the rebate?

143.52

4. Number of rebates awarded.

532

B. Rebate Program Expenditures

	This Year	Next Year
Budgeted Expenditures	61000	75000
2. Actual Expenditures	76350	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Rebate level is based on purchase price of Washer, A3 above is the average of 532 rebates.

yes

BMP 07: Public Information Programs

Reporting Unit:

BMP Form Status: Year: City of Burbank, PSD 2004 100% Complete

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation?

a. If YES, describe the program and how it's organized.

Public information programs encompass direct information mailers, Civic group meetings, community education workshops, Speakers Bureau presentations, School Outreach education and instruction, Town Hall Meetings, the City cable TV channel, BWP's website, billing inserts, and newspaper advertising. Programs include ULFT and Efficient Washing Machine rebates, free showerhead and aerator distribution, and free landscaping classes.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	no	
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	yes	3
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	yes	6
g. Speaker's Bureau	yes	22
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures		
	This Year	Next Year
Budgeted Expenditures	15500	15500
2. Actual Expenditures	15500	
C. "At Least As Effective As"		

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 08:	School	Education	Programs
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Reporting Unit:

City of Burbank, PSD

BMP Form Status: 100% Complete

Year: 2004

A. Implementation

1. Has your agency implemented a school information program to promote water conservation?

yes

2. Please provide information on your school programs (by grade level):

Grade	Are grade- appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	10	191	0
Grades 4th-6th	yes	12	344	0
Grades 7th-8th	no	0	0	0
High School	no	0	0	0
3. Did your Agency's materials r	neet state education	framework require	ements?	yes
		_		

4. When did your Agency begin implementing this program?

10/22/1996

B. School Education Program Expenditures

	This Year	Next Year
Budgeted Expenditures	8000	8000
2. Actual Expenditures	8000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

oorting Unit: y of Burbank, PSD	BMP Form Status: 100% Complete		Year: 2004
mplementation			
1. Has your agency identified and ranked COMMER use?	CIAL customers	according to	ye
2. Has your agency identified and ranked INDUSTR use?	IAL customers ad	ccording to	n
3. Has your agency identified and ranked INSTITUT use?	TONAL customer	s according to	n
Option A: CII Water Use Survey and Custome	er Incentives P	rogram	
4. Is your agency operating a CII water use survey a program for the purpose of complying with BMP 9 up		entives	ye
CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	8	0	
b. Number of New Surveys Completed	8	0	
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0 0		
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	
CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	yes	no	n
f. Evaluation of all water-using apparatus and processes	yes	no	n
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	n
Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h. Rebates	0	120	25880
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option?	yes
6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings?	yes
7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.	13.66
8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991	43.22

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

BMP 09a: CII ULFT Water Savings

Reporting Unit:

BMP Form Status: Year: City of Burbank, PSD 2004 100% Complete

1. Did your agency implement a CII ULFT replacement program in the reporting year?

Yes

If No, please explain why on Line B. 10.

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program? Check all that apply.

Potential savings

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

BWP does not target CII customers.

2. How does your agency advertise this program? Check all that apply.

Bill insert Bill message Newsletter Web page

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

BWP does not target CII customers. This is part of the ULFT Rebate Program.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read Yes the Help information for a complete list of all the information for this BMP.) 2. Would your agency be willing to share this information if the CUWCC did a study No to evaluate the program on behalf of your agency? 3. What is the total number of customer accounts participating in the program during 6 the last year?

CII Subsector		Number of Toi	lets Replaced			
4.	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount	Type Not Specified	
a. Offices	20	0	0	(0 0	
b. Retail / Wholesale	0	0	0	(0 0	
c. Hotels	0	0	0	(0 0	
d. Health	0	0	0	(0 0	
e. Industrial	0	0	0	(0 0	

f. Schools: K to 12	0	0	0	0	0
g. Eating	0	0	0	0	0
h. Govern- ment	0	0	0	0	0
i. Churches	0	0	0	0	0
j. Other	0	0	0	0	0

5. Program design.

Rebate or voucher

6. Does your agency use outside services to implement this program?

No

- a. If yes, check all that apply.
- 7. Participant tracking and follow-up.

Site Visit

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

a. Disruption to business	1
b. Inadequate payback	1
c. Inadequate ULFT performance	1
d. Lack of funding	1
e. American's with Disabilities Act	1
f. Permitting	1
g. Other. Please describe in B. 9.	5

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other isues affecting program implementation or effectiveness.

Customers who did not know about the program did not participate.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

BWP does not target CII customers.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor	0	0
b. Materials	0	0
c. Marketing & Advertising	0	0
d. Administration & Overhead	0	0
e. Outside Services	0	0
f. Total	0	0

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency	1200
contribution	
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	1200

BMP 11: Conservation Pricing

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:

100% Complete 2004

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Non-volumetric Flat Rate

c. Total Revenue from Volumetric Rates \$10031916

d. Total Revenue from Non-Volumetric Charges,

Fees and other Revenue Sources

\$1552192

2. Commercial

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Uniform

c. Total Revenue from Volumetric Rates \$2495496

d. Total Revenue from Non-Volumetric Charges,

Fees and other Revenue Sources

\$217480

3. Industrial

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Uniformc. Total Revenue from Volumetric Rates \$523762

d. Total Revenue from Non-Volumetric Charges,

Fees and other Revenue Sources

\$8564

4. Institutional / Government

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Uniformc. Total Revenue from Volumetric Rates \$426624

d. Total Revenue from Non-Volumetric Charges,

Fees and other Revenue Sources

\$14040

5. Irrigation

a. Water Rate Structure Uniform Seasonal

b. Sewer Rate Structure Uniform

c. Total Revenue from Volumetric Rates \$0

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$0

6. Other

a. Water Rate Structure
 b. Sewer Rate Structure
 c. Total Revenue from Volumetric Rates
 432595

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources

\$480902

B. Conservation Pricing Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

BWP has no irrigation customer class. "Other" consists of fire service.

no

RMP	12.	Consar	vation	$C \cap \cap$	rdinator
DIVIE	14.	COHSCH	vation	CUU	ulliator

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2004

A. Implementation

1. Does your Agency have a conservation coordinator? yes

2. Is this a full-time position?

3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program?

4. Partner agency's name:

5. If your agency supplies the conservation coordinator:

a. What percent is this conservation coordinator's position? 50%

b. Coordinator's Name

Mary Forrest

c. Coordinator's Title

Senior Conservation Advisor

d. Coordinator's Experience and Number of Years

e. Date Coordinator's position was created (mm/dd/yyyy)

1/1/1998

6. Number of conservation staff, including Conservation Coordinator.

B. Conservation Staff Program Expenditures

	This Year	Next Year
Budgeted Expenditures	15500	15500
2. Actual Expenditures	15500	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2004

A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area?

no

a. If YES, describe the ordinance:

2. Is a copy of the most current ordinance(s) on file with CUWCC?

no

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding

b. Single-pass cooling systems for new connections

no

no

c. Non-recirculating systems in all new conveyor or car wash systems

no

d. Non-recirculating systems in all new commercial laundry systems

no

e. Non-recirculating systems in all new decorative fountains

no

f. Other, please name

no

2. Describe measures that prohibit water uses listed above:

None

Water Softeners:

- 3. Indicate which of the following measures your agency has supported in developing state law:
 - a. Allow the sale of more efficient, demand-initiated regenerating DIR models.

yes

b. Develop minimum appliance efficiency standards that:

i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used.

ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced.

c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.

4. Does your agency include water softener checks in home water audit programs?

no

5. Does your agency include information about DIR and exchange-type water

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

softeners in educational efforts to encourage replacement of less efficient timer

no

no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

models?

On-site regeneration of water softeners is prohibited.

102

BMP 14: Residential ULFT Replacement Programs

Reporting Unit:

City of Burbank, PSD

BMP Form Status: Year:
100% Complete 2004

A. Implementation

	Single-Family Accounts	Multi-Family Units	
 Does your Agency have program(s) for replacing high-water- using toilets with ultra-low flush toilets? 	yes	yes	
Number of Toilets Replaced by Agency Program During Report Year			
Replacement Method	SF Accounts	MF Units	
2. Rebate	215	102	
3. Direct Install	0	0	
4. CBO Distribution	0	0	
5. Other	0	0	

Total

215

6. Describe your agency's ULFT program for single-family residences.

ULFT Rebate Program

7. Describe your agency's ULFT program for multi-family residences.

ULFT Rebate Program

8. Is a toilet retrofit on resale ordinance in effect for your service area? no

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

B. Residential ULFT Program Expenditures

	This Year	Next Year
Budgeted Expenditures	160000	160000
2. Actual Expenditures	21448.63	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

APPENDIX I Plan Preparation and Adoption

PLAN PREPARATION AND ADOPTION

A. Plan Preparation

The City of Burbank Urban Water Management Plan 2005 (UWMP 2005) was prepared during the summer and fall of 2005.

Agency: Burbank Water and Power

P.O. Box 631

Burbank, CA 91503-0631

Prepared by: Robert B. Doxsee, Civil Engineering Associate

Phone: (818) 238-3500 Fax: (818) 238-3508

E-mail: BDoxsee@ci.burbank.ca.us

B. Agency Coordination

The Metropolitan Water District of Southern California (MWD) provided supply and demand projections, including agency-level demands for Burbank. Burbank's modified projections of retail demand were based on those from MWD. The MWD Draft 2005 Regional Urban Water Management Plan was the primary source for the regional water supply information in Burbank's plan. Burbank Water and Power personnel attended two coordination meetings, and data exchange continued by telephone and e-mail. The Burbank Draft UWMP 2005 was sent to MWD.

A telephone call to the County of Los Angeles, Office of the Chief Administrative Officer, was referred to the Water Resources Division of the Department of Public Works. They requested and received, by e-mail, a copy of the Draft UWMP 2005.

Burbank Water and Power personnel met informally with City of Glendale Water and Power personnel to discuss approaches to plan requirements. The Draft UWMP 2005 was sent by e-mail.

The Upper Los Angeles River Area Watermaster office sent copies of the 1979 Judgment. The 2005 Watermaster Annual Report and Groundwater Pumping and Spreading Plan were also sources of groundwater information. The Draft UWMP 2005 was sent by e-mail.

The City of Burbank Community Development Department Planning Division provided input and reviewed the draft of Chapter II, Service Area Information. They were sent a copy of the Draft UWMP 2005 by e-mail.

The Burbank Public Works Department Environmental Division, provided input for Chapter V, Water Recycling. They were sent a copy of the Draft UWMP 2005 by e-mail.

C. Public Participation

A notice of Plan preparation ran on the City's scrolling "bulletin board" system on the local cable television government access channel. The public hearing was advertised in the Burbank Leader, and copies of the draft Plan were available for public review in three libraries, at the City Clerk's office, and at the Water Division office, beginning November 5, 2005. The public hearing was held at the regular City Council meeting of November 22, 2005. The Council Meeting was televised on the government access cable channel.

D. Adoption of the Plan

The Burbank Water and Power Board endorsed the Urban Water Management Plan 2005 at its November 17, 2005 meeting.

Following the public hearing at the November 22, 2005 City Council meeting, the Burbank City Council adopted the Urban Water Management Plan 2005. A copy of Resolution No. 27,117 is included in this appendix.

RESOLUTION NO. 27,117

A RESOLUTION OF THE COUNCIL OF THE CITY OF BURBANK ADOPTING URBAN WATER MANAGEMENT PLAN 2005

THE COUNCIL OF THE CITY OF BURBANK FINDS:

- A. The Urban Water Management Planning Act (Water Code Section 10610 <u>et seq.; hereinafter "the Act")</u> mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare and adopt an Urban Water Management Plan, the primary objectives of which are to evaluate water supplies and demands, including the reliability of supplies, to plan for the conservation and efficient use of water, and to prepare for water shortages.
- B. The City of Burbank is an urban supplier of water providing water to a population of over 100,000 and is required to prepare and adopt an Urban Water Management Plan pursuant to the Act.
- C. On December 5, 2000, the City Council duly adopted Urban Water Management Plan 2000 ("Plan") for the City of Burbank by passage of Resolution No. 25,883.
- D. The Act provides that the Plan be reviewed and updated at least once every five years, in years ending in five and zero, and that the City make any changes or amendments to the Plan which are indicated by the review.
- E. Any such changes or amendments to the Plan must be adopted by December 31, 2005, after public review and hearing, and filed with the California Department of Water Resources and the California State Library within thirty (30) days of adoption.
- F. The City has prepared and circulated for public review a draft Urban Water Management Plan 2005, which changes or amends the Plan adopted in 2000.
- G. A duly noticed public hearing regarding such changes or amendments to the Plan was held by the City Council on November 22, 2005.

THE COUNCIL OF THE CITY OF BURBANK RESOLVES:

1. Urban Water Management Plan 2005 is hereby adopted and ordered filed with the City Clerk.

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2. The General Manager of Burbank Water and Power is hereby authorized and directed to file Urban Water Management Plan 2005 with the California Department of Water Resources and the California State Library within thirty (30) days after this date.

PASSED and ADOPTED this 22nd day of November, 2005.

s/Jef Vander Borght
Jef Vander Borght
Mayor of the City of Burbank

Attest:

s/Margarita Campos
Margarita Campos, City Clerk

Approved as to Form and Legal Content: Dennis A. Barlow, City Attorney

By: <u>s/Terry B. Stevenson</u>
Terry B. Stevenson
Senior Assistant City Attorney

STATE OF CALIFORNIA)	
CITY OF BURBANK)	SS.
COUNTY OF LOS ANGELES)	

I, Margarita Campos, City Clerk of the City of Burbank, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the Council of the City of Burbank at its regular meeting held on the 22nd day of November, 2005 by the following vote:

AYES: Council Members Campbell, Golonski, Ramos and Vander Borght.

NOES: Council Members None.

ABSENT: Council Members None.

s/Margarita Campos_

Margarita Campos, City Clerk